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ABSTRACT

This report assesses the income sources, amounts and relative poverty status of welfare families in the Aid to Families with Dependent Children (AFDC) program, and determines the implications of these results for federal welfare policy. Annually, about $15 billion in AFDC payments are made to needy families with children for such basics as food, shelter, clothing, and utilities. The Federal government pays about 54 percent of these costs. AFDC families are also eligible for in-kind food, health care and housing benefits. Each state sets payment standards by family size and can elect program options. Each month about 3.7 million families receive AFDC. Ninety-three percent are headed by one parent, almost always the mother. Nationally, two- to four-member AFDC families had monthly incomes, consisting mostly of welfare benefits, that averaged $819 at market value and $646 at recipients value. AFDC families' cash incomes rarely exceeded the poverty level. Nine of ten AFDC families participated in at least two other federal welfare programs. The following three factors affect individual AFDC family incomes: (1) state of residence; (2) subsidized housing; and (3) earnings. As AFDC payments become larger, benefits from the other programs become smaller. The report highlights the following matters having implications for welfare policy: (1) the extent of states' discretion in setting AFDC eligibility criteria and payment levels; (2) AFDC's interactions with other programs; (3) public housing inequalities due to limited availability; (4) validity of official poverty thresholds; and (5) valuing in-kind benefits in determining incomes. Data are presented on 20 tables and figures. Appendices describe the valuation techniques employed, discuss the data quality, and enumerate sampling errors. (BJV)

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United States General Accounting Office

GAO

Report to the Honorable
William V. Roth, Jr., U.S. Senate

November 1987

WELFARE

Income and Relative Poverty Status of AFDC Families

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United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-225966

November 4, 1987

The Honorable William V. Roth, Jr.
United States Senate

Dear Senator Roth:

This report is the second we have issued in response to your March 27, 1986, request. The first report, issued February 19, 1987, provided information on issues to consider in assessing welfare reform proposals. This report presents information on the amounts and sources of income for families receiving Aid to Families with Dependent Children (AFDC); how the income from the various sources affects their total incomes; and their economic status compared to the poverty line and other welfare and nonwelfare families. It also summarizes the difficulties in making such determinations because of uncertainty about the accuracy of the poverty line and unresolved concerns about the Bureau of the Census's experimental techniques for valuing in-kind benefits.

As requested by your office, we did not obtain formal agency comments on this report. However, we discussed our work with officials at various federal and state agencies during the course of our review and considered their views in preparing this report. As agreed, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to other interested parties and make copies available to others who request them.

Sincerely yours,

Edward A Densmore

for Richard L. Fogel
Assistant Comptroller General

Executive Summary

Purpose

Little is known about the incomes of welfare families, including those in the Aid to Families With Dependent Children (AFDC) program. Though there have been recent policy debates about income levels, data on families' total incomes that include the value of in-kind benefits do not exist in any usable form. Thus, Senator William V. Roth, Jr., asked GAO to determine

- the income sources, amounts, and relative poverty status of AFDC families, and
- the implications of these results for federal welfare policy.

Background

Annually, about $15 billion in AFDC payments are made to needy families with children for such basics as food, shelter, clothing, and utilities. The federal government pays about 54 percent of these costs. AFDC families are also eligible for in-kind food, health care, and housing benefits that account for most of the federal welfare expenditures. Each month about 3.7 million families receive AFDC. Ninety-three percent are headed by one parent—almost always the mother. (See p. 10.)

Each state sets payment standards by family size and can elect such program options as allowing payment to two-parent families if the principal earner is unemployed. Within limits, families can supplement their AFDC benefits with earnings and also participate in other welfare programs. (See p. 10.)

In calculating the official poverty rate, the Bureau of the Census counts only cash income and uses poverty and income definitions developed in the 1960's. Since then, such in-kind benefit programs as Medicaid and Food Stamp expanded greatly, and now comprise over 70 percent of total federal welfare expenditures. Many believe that the cash value of in-kind benefits should be counted in determining a welfare family's income. The Census Bureau, in response to a congressional request, developed three experimental and controversial methods for valuing in-kind benefits. (See pp. 12 and 13.)

GAO's analysis of AFDC families' total incomes (cash—including AFDC payments, earnings, and child support—and in-kind benefits from six public-assistance programs) and relative poverty status is based on (1) a national sample of 300 AFDC families from the Census Bureau's April 1984 Survey of Income and Program Participation data, and (2) 799 families receiving AFDC in April 1986 from four counties—Alameda, California; Albany, New York; Cuyahoga, Ohio; and Fulton, Georgia. The

samples were limited to families with two, three, and four recipients, which account for 80 percent of AFDC families. (See pp. 14 and 15.)

At the national level, GAO used two of the Census Bureau's methods to value in-kind benefits—market value (the cost of buying similar benefits in the market) and recipient value (the amount consumers with characteristics similar to welfare recipients would pay for such items). At the county level, GAO approximated the Census Bureau's market value, but could not approximate the recipient value due to a lack of data. (See p. 16.)

Because of incomplete data about income available to AFDC families who live with others not on AFDC, this report focuses primarily on the 60 percent of AFDC families who live alone. (See p. 14.)

Results in Brief

Nationally, two- to four-member AFDC families that lived alone had monthly incomes (cash and in-kind benefits) that averaged $819 at market value and $646 at recipient value. Their incomes consisted mostly of welfare benefits, and were affected by such factors as where they live, the availability of housing assistance, and earnings. (See pp. 21 to 29.)

AFDC families' cash incomes (such as AFDC and earnings) rarely exceeded the poverty line. When in-kind benefits except Medicaid were counted, 26 percent at market value had total incomes exceeding the poverty line compared with 21 percent at recipient value. Including Medicaid increased the percentages to 60 and 27, respectively. However, AFDC families' average monthly income was $205 and $580 lower at market value than that of two groups of comparably sized welfare families not receiving AFDC, and $1,042 lower than that of comparably sized nonwelfare families. (See p. 30.)

GAO's work highlighted matters having implications for welfare policy regarding (1) the extent of states' discretion in setting AFDC eligibility criteria and payment levels, (2) AFDC's interactions with other programs, (3) public housing inequities due to limited availability, (4) validity of official poverty thresholds, and (5) valuing in-kind benefits in determining incomes. (See pp. 39 and 40.)

GAO's Analysis

Income Amounts of AFDC Families

Nationally, AFDC families' monthly median income was $759 at market value and $563 at recipient value; average monthly income was $819 and $646, respectively. Half the families had incomes between $631 and $917 at market value and between $464 and $738 at recipient value. An estimated 1 to 5 percent of the families had monthly incomes at market value above $1,500. (See p. 21.)

Most Support Comes From Welfare Programs

Nationally, and in the four counties, 9 of 10 AFDC families participated in at least two other federal welfare programs. Nationally, an average of 92 percent of individual family incomes at market value, and 90 percent at recipient value, was derived from welfare programs and an average of only 5 and 6 percent, respectively, was from earnings. Remaining income came from other nonwelfare sources, including Social Security, veterans' benefits, alimony, and child support. (See pp. 24 and 25.)

Three Factors Affect Income

For a given valuation technique and a fixed family size, factors affecting individual AFDC family incomes are:

1. State of residence. Each state determines AFDC payment levels by developing a "need standard" and establishing the percentage of this standard it will pay. As of January 1987, 20 states paid 100 percent of their need standard—the others paid from 31 to 90 percent. Maximum cash payments to a three-person family ranged from $118 per month in Alabama to $749 in Alaska; the median was $354. AFDC payments affect the benefit levels of such other programs as Food Stamp and Section 8 Housing. In general, the higher the AFDC payment level, the lower the other benefits. (See p. 26.)

2. Subsidized housing. The receipt of a federal housing subsidy significantly affects total family incomes. Subsidized housing, however, is not equally available in the states, and thus not available to all eligible AFDC families. In Fulton County, Georgia, where AFDC payments were lowest among the four counties GAO sampled, average family income was higher than in two of the other counties because the county's participation in housing programs was higher. (See pp. 26 and 27.)

3.Earnings. Relatively few AFDC families had earnings. Because of program offsets, those who had earnings received less welfare benefits but had higher total incomes than those without earnings. Generally, earnings do not offset welfare aid dollar for dollar. (See pp. 25, 27, and 28.)

Comparisons With the Poverty Line and Other Groups

Nationally, 8 percent of AFDC families had cash incomes exceeding poverty thresholds. Counting their in-kind benefits at market value, however, increased the percentage to 60 percent, and at recipient value to 27 percent. The pattern was similar (at market value) in the four sampled counties. Medicaid—by far the most controversial benefit to value—caused the biggest changes in families' poverty status. (See pp. 30 to 33.)

Although comparing welfare families' incomes to the poverty line is commonly done in determining poverty rates, the poverty line is widely criticized as obsolete and nonreflective of living costs and spending patterns of the poor. Also, some researchers believe that valuing medical care in determining incomes can distort recipients' relative poverty status. (See pp. 30 to 32.)

Nationally, AFDC families' average monthly income of $819 at market value was lower than the average incomes of two groups not receiving AFDC but receiving other welfare benefits. The groups and their average incomes were: single-parent families with one to three children ($1,024), and married couples with one or two children ($1,399). Also, single-parent nonwelfare families with three or fewer children had an average monthly pretax income of $1,709. (See pp. 35 to 37.)

Recommendations

This report highlights matters having policy implications, but contains no recommendation for congressional or agency action.

Agency Comments

GAO did not request official agency comments on this report. GAO reviewed a draft of the report with federal and state program officials and a number of welfare consultants and experts, and considered their comments in preparing the report.

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Abbreviations

AFDC	Aid to Families with Dependent Children
GAO	General Accounting Office
OBRA	Omnibus Budget Reconciliation Act of 1981
OMB	Office of Management and Budget
SIPP	Survey of Income and Program Participation
SSI	Supplemental Security Income
WIC	Special Supplemental Food Program for Women, Infants, and Children

Introduction

In March 1986, Senator Roth asked us to develop information for the Congress to use in assessing proposals to reform the welfare system. In partial fulfillment of that request, we issued our report entitled Welfare: Issues to Consider in Assessing Reform Proposals (GAO/HRD-87-51BR, Feb. 19, 1987). This report provides information, from both the national level and four selected counties, about (1) the incomes and relative poverty status of the major welfare reform target group—families receiving Aid to Families with Dependent Children (AFDC), and (2) the related welfare policy implications. Several pending welfare reform bills would affect AFDC family incomes.

The AFDC Program

The AFDC program is managed by the Family Support Administration of the Department of Health and Human Services (HHS) and administered by state and local governments. The federal government pays 50 percent of the states' administrative costs and, depending on the state, from 50 to 78 percent (an average 54 percent) of benefits. Twenty-four states, at their option, limit eligibility to one-parent families. The remaining 26 states and the District of Columbia extend eligibility to two-parent families.

Annually, AFDC payments total about $15 billion with about 3.7 million families participating each month. Ninety-three percent of these families—which in 1986 included 7.2 million children—are headed by one parent, almost always the mother. Eight out of 10 AFDC families contain three or fewer children.

AFDC cash payments are intended to help pay for food, shelter, clothing, and other essential items of daily living. Recipients can supplement their AFDC benefits with (1) earned income up to prescribed limits; (2) child support payments; (3) other cash assistance, such as Low-Income Home Energy Assistance; and (4) "in-kind" or noncash assistance, such as food, housing, and medical care.

In 1980 we reported that, despite wide differences in state-set AFDC benefits, 80 percent of sampled AFDC families received cash and in-kind welfare benefits that exceeded the official federal poverty thresholds, but our sample was not projectable to the AFDC universe.[1] Since our 1980 report, AFDC and related program changes have been made that affect

[1] Public Assistance Benefits Vary Widely From State to State, but Generally Exceed the Poverty Line (GAO/HRD-81-6, Nov. 11, 1980).

AFDC families' eligibility and benefit levels, and the Census Bureau has done additional research on computing values for in-kind benefits.

Recent Changes to AFDC and Related Welfare Programs

Changes to AFDC and related programs since 1980 have primarily affected families with children, especially single-parent families. Recent poverty studies show that a higher percentage of single-parent families with children live in poverty than do married-couple families with children or elderly households. Moreover, concerns about such matters as unwed teenage mothers on welfare have led to widespread debate about federal income support policies for families. The President's Domestic Policy Council's recent study found that "America's welfare system has done little or nothing to encourage the formation of stable, economically self-reliant families."[2]

The Omnibus Budget Reconciliation Act of 1981 (OBRA) made significant changes to the AFDC program. The act's primary thrust was to target benefits to the most needy. OBRA tightened eligibility for working recipients and reduced benefits for recipients living with stepparents. It also prohibited the receipt of AFDC by students beyond high school, strikers, and first-time pregnant women until the third trimester. In 1984 we reported that the OBRA changes removed about a half million families from the AFDC rolls and reduced the benefits of many others.[3]

OBRA also changed AFDC work policies from reliance on work incentives to emphasis on work requirements. For example, states could, with federal funding assistance, establish work programs to help recipients (without young children) find work or require them to work off the value of AFDC and Food Stamp benefits. In January 1987, we reported that state programs were having limited success, and that the long-term prospects of reducing dependency through such programs were unknown.[4]

During OBRA's implementation, other programs in which AFDC recipients often participate also had benefits trimmed. Section 8 lower income

[2]Up From Dependency: A New National Public Assistance Strategy (Report to the President by the Domestic Policy Council Low Income Opportunity Working Group, Dec. 1986), p. 31.

[3]An Evaluation of the 1981 AFDC Changes: Initial Analyses (GAO/PEMD-84-6, Apr. 2, 1984).

[4]Work and Welfare: Current AFDC Work Programs and Implications for Federal Policy (GAO/HRD-87-34, Jan. 29, 1987).

housing assistance and public housing subsidies, for example, were lowered by changes in the formula used for calculating government subsidized rents. Also, Food Stamp benefits were frozen during most of fiscal year 1981 and reduced in fiscal year 1982.

Subsequent program changes, however, offset these reductions somewhat. In 1984, for example, AFDC recipients were allowed to keep the first $50 of monthly child support collected by the states on their behalf. Also, the AFDC gross income limit for eligibility was raised from 150 percent of a state's AFDC need standard to 185 percent, and under certain conditions families were allowed to retain Medicaid eligibility for 9 months after losing AFDC benefits. In 1985, the Food Stamp program was amplified by increasing both the earned income deduction and the dollar limits on assets held by eligible households.

In-Kind Benefits and Valuation Issues

Nearly nonexistent in 1935, when the AFDC program was established, in-kind benefits have grown steadily since the 1960's and today constitute over 70 percent of federal welfare expenditures. Today, AFDC recipients

- may obtain food stamps from the local welfare office, free school lunches for school-aged children, vouchers for specific foodstuffs under the Special Supplemental Food Program for Women, Infants, and Children (WIC) program, and limited assistance from local food banks;
- can receive subsidized rent payments from local housing authorities to private landlords under the federal Section 8 program or low-rent housing in federally owned public housing projects; and
- are automatically eligible for Medicaid, which pays for most health care they receive from local medical providers that is not covered by private health insurance.

Fiscal year 1986 federal/state expenditures for benefits under some of the major in-kind programs were: Food Stamp—$11 billion; Section 8 Housing—$7 billion; and Medicaid—$23 billion.

In determining the official poverty rate, the Census Bureau does not assign monetary values to in-kind benefits and, consequently, does not count them as income for welfare families. The Census Bureau defines income as wages and salaries, self-employment income, interest, dividends, rental income, Social Security income, AFDC and other cash welfare payments, and other forms of cash income. Some researchers have criticized this definition because it does not include in-kind benefits. Thus, at the request of the Congress, the Census Bureau has developed

three experimental techniques to measure the effects of in-kind benefits on official poverty rates.

The three techniques are

- market value—the cost of purchasing similar benefits in the market;
- recipient value—the average amount unsubsidized consumers with characteristics similar to recipients (income, family size, age, etc.) pay for goods or services (e.g., housing, food, medical care); and
- poverty budget share—the upper dollar limits assigned to benefit values, based on current poverty thresholds and expenditures by families at or near the poverty line.

A more detailed explanation by the Census Bureau of these techniques is in appendix I. Each technique generally yields a different value for the same in-kind benefit. Generally the market value yields a higher value than either the recipient value or poverty budget share techniques. The values derived under the recipient or poverty budget share techniques can equal but not exceed the market value. Also, since both the recipient and poverty budget share techniques are based on the expenditures of unsubsidized households they tend to produce similar values.

Which technique most accurately reflects the value of in-kind benefits? Should the face value of food stamp coupons be added to cash because they are spent like cash to purchase food items? Should a value for subsidized housing be added to cash because the housing costs less than what could be obtained in the private market? Should medical care be valued the same way as other in-kind benefits or be valued at all? These are the sort of valuation issues the Census Bureau is currently seeking to resolve. How these issues are decided can affect perceptions about the adequacy of welfare recipient incomes, as well as the welfare system's overall effectiveness.

GAO has issued two reports on the Census Bureau's efforts to value in-kind benefits, and urged caution in using the Bureau's methods because of concerns about the technical adequacy of the methods.[5] Also, the Bureau's Technical Paper 55: "Estimates of Poverty Including the Value

[5]Noncash Benefits: An Evaluation of the Census Bureau's Measurement Conference (GAO/PEMD-86-8BR, Apr. 17, 1986) and Noncash Benefits: Initial Results Show Valuation Methods Differentially Affect the Poor (GAO/PEMD-87-7BR, Oct. 24, 1986).

of Noncash Benefits, 1984," cautions that there is no consensus concerning the relative merits of various methods of valuing noncash benefits.

Objectives, Scope, and Methodology

In his March 1986 request and subsequent discussions, Senator Roth asked us to determine

- the amounts of AFDC recipient incomes;
- the major programs and other sources of AFDC recipients' incomes and how income from these sources affects total incomes;
- how AFDC recipient incomes compare with (1) the poverty line, (2) other welfare recipient (those not receiving AFDC) incomes, and (3) nonwelfare family incomes; and
- the welfare policy implications of our results.

Types of Information Collected

AFDC families live in two household types: (1) those comprised solely of AFDC recipients and (2) those containing AFDC recipients and persons who do not receive AFDC. Households comprised solely of AFDC recipients accounted for 60 percent of a national sample of AFDC cases and 66 percent of cases sampled in four counties. Because of limited data for AFDC families living with others, we could not determine how much of the household income was available to them. Accordingly, we discuss primarily the incomes of AFDC families not living with others in this report.

Using the Census Bureau's Survey of Income and Program Participation (SIPP) data, we produced a nationally projectable sample of incomes for AFDC recipients, other welfare recipients, and single-parent families not receiving welfare. SIPP data are collected from a stratified sample of about 20,000 noninstitutional households nationwide. Sampled households are interviewed every 4 months to obtain monthly data on individual and household income, employment status, and participation in federal benefit programs.

We limited our analysis of SIPP income and federal program participation data to a single month—April 1984. The Census Bureau's weighting and estimating procedures were used to make our national estimates. These estimates are based on SIPP samples of 499 AFDC households (300 of which were reportedly comprised solely of two, three, or four AFDC recipients and were used for most of our analyses), 365 one-parent and 359 married-couple households that received welfare benefits other

than AFDC or Supplemental Security Income (SSI),[6] and 644 one-parent households that did not receive a welfare benefit.

Because SIPP data were not projectable at local levels with sufficient reliability for our purposes, we also obtained income and program participation data from samples of AFDC households in four counties—Alameda County, California and Albany County, New York (whose respective three-person family AFDC maximum monthly payment levels were in the top third of all states); Cuyahoga County, Ohio (in the middle third); and Fulton County, Georgia (in the bottom third).

In each county, a stratified random sample of 300 AFDC families was drawn from the universe of AFDC families with two, three, or four members receiving an AFDC payment in April 1986. Families of these three sizes represent 80 percent of all AFDC families nationally. Each county's sample was composed of 100 cases from each family size. In all we sampled 1,200 cases, 799 of which were for households comprised solely of AFDC recipients and were used for most of our analyses. The income and program participation data are not projectable beyond the county level.

In each county we visited the AFDC office, and from its welfare files recorded each sampled family's April 1986 AFDC and Food Stamp payment, earned income, and other recorded income and assistance. We also visited county housing authorities and WIC agencies to determine the amount of public housing, section 8 housing, and WIC benefits provided to sampled families in April 1986. We interviewed local school officials to determine the average price of school lunches, and state and county welfare officials to identify any local programs that provide continuing support to AFDC families.

Appendixes III and IV show sampling errors for key SIPP and county estimates respectively.

Analysis of the Data

In both our national and county data, we identified the amounts of cash and in-kind income for each sampled household. To determine each family's total income, we added all its cash income (including AFDC payments, earnings, and child support) to the values for in-kind benefits obtained from the Food Stamp, Medicaid, WIC, public housing, section 8 housing, and school lunch programs.

[6]We excluded SSI because the program assists the aged, blind, and disabled rather than families with children, which were used for our comparisons.

We compared the April 1984 national data to 1984 poverty thresholds and the 1986 county data to 1986 poverty thresholds. We also compared national AFDC family income data to that of similar-size families receiving other welfare benefits, and to similar-size households receiving no welfare benefits. We did not make such comparisons at the county level because non-AFDC household data were not available.

Techniques Used to Value In-Kind Benefits

To present a range of possible valuation results, for the national data, we used two of the three Census Bureau valuation techniques—market value (high) and recipient value (low)—to compute values for Food Stamp, Medicaid, housing, and school lunch benefits.[7] The Bureau's Poverty Budget Share valuation technique provides similar values to the recipient technique. The data on which market and recipient value computations were based are in Appendix B of the Bureau's Technical Paper 55 (see app. I.)

Census Bureau data for computing market and recipient values are not appropriate for valuing in-kind benefits locally and were not used for our county samples. Instead, we used methods that approximated the Bureau's market value technique. The absence of household expenditure data for the counties prevented us from developing techniques that would approximate the recipient or budget share values.

We applied the Census Bureau's market value and recipient value techniques to the national SIPP data and our market value approximations to the county data as described below.

Market Value Method—National Data

Food stamps. Consistent with the Census Bureau's method, GAO valued food stamps at their face value as reported in the SIPP for each family (see p. 42).

School lunches. In assigning monthly values for school lunches, GAO used the Census Bureau's nationwide estimates of daily per meal subsidies with a minor adjustment (see p. 42). Assuming 20 school days in April, we assigned a per child monthly value. The per child amounts were then summed to determine the family benefit.

[7]The Census Bureau does not provide a valuation technique for WIC benefits that are small in amount. Thus, we used the amounts reported in SIPP for both the market and recipient value of the benefits.

Public and other subsidized rental housing. In assigning monthly values for public housing and section 8 rental assistance, GAO assigned the Census Bureau's nationwide estimates of average housing subsidies (see p. 42). We assigned these values to each family that reported receiving such subsidies.

Medicaid. To determine the monthly values for Medicaid, GAO used the Census Bureau's per person nationwide dollar estimates for noninstitutionalized persons (see p. 45). These values were assigned to each person in the family and then summed to determine the Medicaid value for each family.

The Census Bureau determined per person market values by dividing Medicaid benefits paid by the number of recipients of those benefits. The Census Bureau reported that their computation may overstate the values somewhat, because the number of recipients rather than the number of enrollees was used. But they added that (1) no data were available that could be used to develop accurate ever-enrolled figures, and (2) use of estimated recipient counts provides a more consistent and stable data base to examine the effect of noncash benefits on changes in poverty levels over time periods.

Recipient Value Method—National Data

Food stamps. Consistent with the Census Bureau's method, GAO valued food stamps for each family at the lesser of (1) their face value as reported in SIPP, and (2) the Bureau's estimates of normal expenditures for food (see p. 45).

School lunches. Consistent with the Census Bureau's method, GAO assigned recipient values to school lunch benefits for each child that were equal to the market value of these benefits (see p. 51). Assuming 20 school days in April, we assigned a per child monthly value. The per child amounts were then summed to determine the family benefit.

Public and other subsidized rental housing. In assigning monthly values for the public housing and section 8 housing, GAO used the Census Bureau's estimates of the values of subsidized and nonsubsidized rents (see p. 51). We assigned these values to each family that reported receiving such subsidies.

Medicaid. To determine the monthly values for Medicaid, GAO used the Census Bureau's per household nationwide dollar estimates of normal expenditure values for medical care (see p. 53).

Market Value Approximation—County Data

Medicaid. We obtained the average monthly statewide Medicaid cost per AFDC eligible from each state for the latest 6- to 12-month period available (periods were in the 1985/1986 time frame). Values per family member per month ranged from $58 in Alameda County to $91 in Cuyahoga County. These values were summed, based on the number of family members, to determine the Medicaid value for each family.

Food stamps. We valued food stamps as the dollar amount of the coupons issued to each AFDC family.

Public housing. We valued public housing assistance by subtracting the rent paid by the AFDC family from the HUD-determined April 1986, fair market rent for a similar-size housing unit in the area.

Section 8 rental assistance. We valued section 8 assistance as the amount paid by housing authorities for a family to the landlords as rent subsidies.

School lunch. We valued school lunches by obtaining local data on the average price charged for a school lunch in the county. All school-age children in each sampled household were assumed to receive free school lunch benefits during April 1986. Assuming 20 school days in April, we assigned a per child monthly value that ranged from $14 in Fulton County to $20 in Alameda and Cuyahoga counties. The per child amounts were then summed to determine the family benefit.

WIC. We valued WIC benefits at the dollar amount of the vouchers issued to a family.

In developing our study methodologies and presenting the study results we consulted the Congressional Budget Office, Congressional Research Service, the Bureau of the Census, and other federal agency officials, as well as private consultants and experts. Our estimates are subject to variation for the following reasons:

- The Census Bureau cautions users of SIPP data that, because respondents fail to report accurately all income resources and amounts, household surveys such as SIPP tend to underestimate the number of persons receiving income and the average amount received. For example, the Census Bureau reported that for the second quarter of 1984, SIPP identified 14 percent fewer AFDC recipients and 9.5 percent fewer Food Stamp

recipients than did the agencies administering the programs.[8] (Appendix II provides more detailed information reported by the Census Bureau concerning SIPP data quality, including underreporting.)

- The county data we obtained on nonwelfare income are also subject to underreporting. For example, quality control monitoring for the AFDC and Food Stamp programs consistently reveals some underreporting of earnings and other incomes.
- Labor force activity and welfare program participation are subject to variations that may not be reflected in an analysis of any 1 month's data. For example, a 1985 study using monthly income data found that between 14.0 and 16.3 percent of all households were poor in any given month.[9] When annual income data were used, the poverty rate dropped to 12.2 percent. The study attributed the difference to variations in income that occurred throughout the year. Thus, caution should be used in attempting to annualize the monthly income data in this report.
- The latest SIPP data available were for 1984. Because county data for 1984 were not readily available, we used 1986 county data. Thus, our national and county data are not chronologically comparable.
- We were unable to develop valuing techniques similar to the recipient and poverty budget share techniques for use at the county levels. Therefore, family incomes are given only in terms of their value according to a market value technique. If techniques similar to the recipient and poverty budget share could have been used, income amounts would have been lower than reported using the market value technique.

Our review was conducted in accordance with generally accepted government auditing standards, except that we neither assessed the SIPP data reliability nor reviewed the counties' internal controls to ensure the accuracy of welfare benefit payments. However, the Census Bureau performs various tests to assure the accuracy of SIPP data and estimating procedures, and federal and state agencies, through quality control and other systems, periodically review county controls to assure welfare payments are accurate. In addition, in accordance with the requester's wishes, we did not obtain agency comments on a draft of this report. However, we reviewed our findings and policy implications with federal and state program officials and a number of welfare consultants and

[8]U.S. Bureau of the Census, Current Population Reports, Series P-70, No. 4, Economic Characteristics of Households in the United States: Second Quarter 1984 (U.S. Government Printing Office, Washington, D.C., 1985).

[9]Eric A. Hanushek and Roberton Williams, Alternative Poverty Measures and the Allocation of Federal Benefits (Congressional Budget Office, Dec. 1985), pp. 8 and 36.

experts, several of who commented on a draft of this report. We considered their comments in preparing this report.

Amounts, Sources, and Key Factors Affecting Family Incomes

Monthly income data from the national and four county samples showed that incomes of two- to four-member AFDC families consist primarily of benefits from welfare programs, and are affected by certain factors. Specifically, we found that:

- Nationally, the monthly incomes of AFDC families averaged $819 at market value and $646 at recipient value. Among the four counties sampled, the average monthly income at market value, ranged from $790 to $1,017.
- Nationally, the percentage of individual AFDC family incomes that came from welfare programs averaged 92 percent at market value and 90 percent at recipient value.
- Because of state discretion in setting AFDC payment levels, payments vary widely among the states. However, AFDC payments are counted as income to reduce some other cash and in-kind assistance levels, thereby partially offsetting variations in AFDC payment levels.
- Factors that affect the amount and composition of individual AFDC family incomes are state of residence, availability of housing assistance, and earnings.

Because in-kind benefit valuation is such a significant consideration in determining total incomes, where national incomes are shown, we identify the valuation technique used to assign a dollar amount to such benefits. In-kind benefits in the county samples are shown using only market value because a lack of local consumer expenditure data prevented us from computing a recipient value.

AFDC Family Incomes

Nationally, the average monthly incomes for AFDC families was $819 at market value and $646 at recipient value, as shown in table 2.1. Under both valuation methods, 50 percent of the families had monthly incomes within $190 of the average.

Table 2.1: National Monthly Income Amounts, April 1984[a]

Valuation technique	Bottom quarter	Median income	Average (mean) income	Top quarter
Market	$631 or less	$759	$819	$917 or more[b]
Recipient	464 or less	563	646	738 or more

[a]Amounts are determined from 300 families with two, three, or four family members.

[b]An estimated 10 to 20 percent of families had monthly incomes over $1,000, 1 to 5 percent had monthly incomes over $1,500, and 0 to 3 percent had monthly incomes over $2,000.

Among the four sampled counties, average monthly income at market value ranged from $790 to $1,017, as shown in table 2.2. At least 50 percent of the families had incomes within $250 of the average in their county.

Table 2.2: Monthly Income Amounts in Four Counties, April 1986[a]

County	Bottom quarter	Median income	Average income	Top quarter
Fulton[b]	$805 or less	$991	$930	$1,177 or more
Cuyahoga	630 or less	810	790	1,021 or more
Albany	808 or less	911	906	1,081 or more
Alameda	887 or less	1,061	1,017	1,258 or more

[a]Amounts are determined from 799 families with two, three, or four family members.

[b]Fulton County is in the bottom third of state AFDC payment levels, Cuyahoga in the middle third, and Albany and Alameda in the top third.

Of the four counties, Fulton had the lowest average monthly AFDC payment level for two- to four-member families ($246) and Alameda the highest ($539), a difference of $293. Yet, the average income for AFDC families in Fulton was only $87 less than in Alameda, and was the second highest of the four counties. This was because 76 percent of the AFDC families in Fulton received federally subsidized housing compared to 33 percent of the AFDC families in Albany, which had the second highest participation rate in subsidized housing.

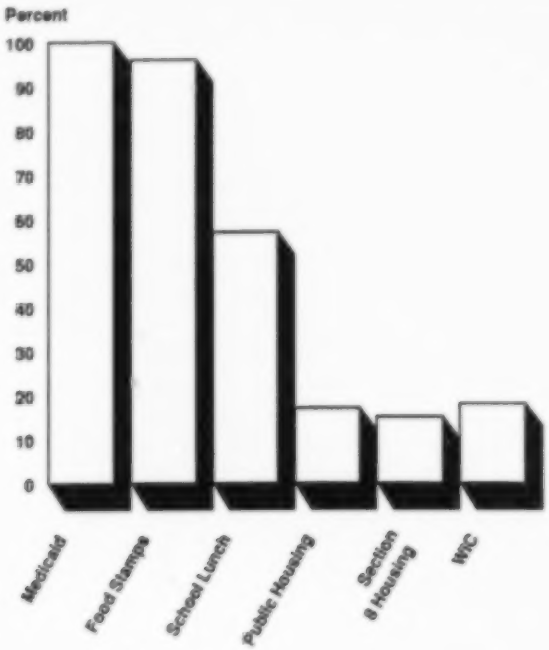
Families with higher incomes living in one county may not enjoy a higher living standard than those with less income in another county. Cost-of-living data indicate, for example, that it costs considerably less to live in Atlanta, Georgia (near Fulton County), than in San Francisco, California (near Alameda County).[1] Cost-of-living data were not available by county.

[1]Eric A. Hanushek and Roberton Williams, Alternative Poverty Measures and the Allocation of Federal Benefits (Congressional Budget Office, Dec. 1985), p. 38.

Almost All AFDC Families Participate in Other Welfare Programs

Nationally and in the four counties sampled, 9 of 10 AFDC families participated in at least two federal welfare programs in addition to AFDC. Nationally, as shown in figure 2.1, participation was highest in the Medicaid (100 percent),[2] Food Stamp (96 percent), and School Lunch (57 percent) programs. These were followed by the WIC (18 percent), Public Housing (17 percent), and Section 8 Housing (15 percent) programs.

Figure 2.1: Percentages of AFDC Families Participating in Major Welfare Programs Nationally, April 1984[a]



[a]Amounts are determined from 300 families with two, three, or four family members.

In the four counties sampled, AFDC family participation rates in major welfare programs, except housing programs, were generally similar to the national rates (see table 2.3).

[2]All families are shown participating in Medicaid because of their automatic eligibility, although not all may receive medical care in a given month.

Table 2.3: Percentages of AFDC Families Participating in Major Welfare Programs in Four Counties, April 1986[a]

County	Medicaid	Food stamps	Housing		School lunch	WIC
			Section 8	Public		
Fulton	100	94	27	49	63	17
Cuyahoga	100	97	6	7	60	22
Albany	100	99	14	19	43	39
Alameda	100	89	23	9	69	16

[a]Amounts are determined from 799 families with two, three, or four family members.

According to state and county welfare officials, no state or local program provides recurring, long-term aid to AFDC recipients residing in the four counties. They told us, however, that private sources—such as United Way, Salvation Army, church charities, and food banks—provide cash, food, and housing assistance on a temporary basis to needy persons.

Most AFDC Family Support Comes From Welfare Programs

Nationally, the percentage of income for individual AFDC families that came from welfare programs averaged 92 percent at market value and 90 percent at recipient value. Three welfare programs—AFDC, Medicaid, and Food Stamp—accounted for the bulk of the income. The families' percentages of income from earnings averaged only 5 percent at market value and 6 percent at recipient value. Their remaining income came from other nonwelfare sources, including Social Security, veteran benefits, alimony, and child support. (See table 2.4.)

Table 2.4: Average Percentage of Income by Source for AFDC Families, National Data, April 1984[a]

Source	Average percentage of income[b]			
	Market value		Recipient value	
Welfare programs				
AFDC	41		53	
Medicaid	19		5	
Food Stamp	18		17	
Other welfare	14	92	15	90
Nonwelfare				
Earned income	5		6	
Other nonwelfare	3	8	4	10
Total		**100**		**100**

[a]Amounts are determined from 300 families with two, three, or four family members.

[b]Percentages of individual family incomes by source were calculated and then averaged for all families.

Among the four counties sampled, the percentage of income for individual AFDC families at market value that came from welfare programs averaged 92 percent in Albany, New York; 94 percent in Alameda, California; 96 percent in Fulton, Georgia; and 98 percent in Cuyahoga, Ohio.

Number of AFDC Families With Earnings Appears Small

Although the number of AFDC families with earnings in our national sample was too small to make valid nationwide estimates, the Congressional Research Service estimated that in 1983, on average, about 204,000 AFDC families had earnings (5.7 percent of the nationwide caseload).[3]

To make county estimates of the numbers of AFDC recipients with earnings, we combined our samples of AFDC families living alone and those living with others and estimated the percentage of households containing AFDC recipients with earnings. The results were: Cuyahoga, 3 percent; Alameda, 7 percent; Fulton, 7 percent; and Albany, 16 percent. These percentages were calculated using AFDC recipients' earnings, and excluded earnings by non-AFDC household members. While the number of families with earnings (both nationally and in the four counties) appears relatively small, earnings can significantly affect individual family incomes, as discussed on page 27.

Differences among the counties in the percentage of AFDC families with earnings could be due, in part, to the availability of employment programs. For example, in Cuyahoga County—which had a low percentage of families with earnings—officials told us that the county had a shortage of work program slots for all eligible AFDC recipients. On the other hand, officials in Albany County—which had a higher percentage of families with earnings—reported successes with the county's employment and training programs. Time did not permit us to examine causes for the disparities.

Three Factors Affect Income Amount

For a given valuation technique and a fixed family size, the amount of AFDC family income is affected by three factors: (1) state of residence, due to wide variances in state-set AFDC payment levels; (2) availability of housing assistance; and (3) earnings.

[3]Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means, 1986 Edition.

State of Residence

Each state determines its AFDC payment level by developing a "need standard" and establishing the percentage of the standard it will pay. As of January 1987, 20 states paid 100 percent of their need standard, and the remaining states paid from 31 to 90 percent. Because of such discretion, AFDC payment levels vary dramatically among the states for families of the same size. As of January 1987, for example, maximum AFDC payment levels for a three-recipient family ranged from $118 per month in Alabama to $749 in Alaska; the median was $354.[4] In our four sampled counties—selected to show how differences in AFDC payment levels can affect total income—average AFDC payments to two- to four-member families were: Fulton, $246; Cuyahoga, $288; Albany, $392; Alameda $540.

Disparities in AFDC family incomes among states, caused by varying AFDC payment levels, can be reduced when the families participate in other programs. This occurs because AFDC payments are considered income when calculating benefit amounts in certain other programs. Thus, the smaller the AFDC payment the higher the benefit from such programs as Food Stamp, Public Housing, and Section 8 Housing.

Availability of Housing Assistance

Nationally, about one-third of the AFDC families received public or section 8 housing subsidies that averaged $150 a month at market value. As shown in table 2.5, nonsubsidized families, on average, received more income from each of the other income sources, yet the total monthly income of families who received housing subsidies was $33 higher.

Table 2.5: National Average Monthly Income of AFDC Families With and Without Housing Subsidies, April 1984[a,b]

	Market value		
Type of income	With housing	Without housing	Difference
Housing	$150	•	$150
AFDC	296	342	(46)
Food stamps	131	136	(5)
Medicaid	150	153	(3)
Earnings	33	88	(55)
Other	81	89	(8)
Total	**$841**	**$808**	**$33**

[a]Amounts are based on aggregate data and should not be used to calculate average percentages of individual family incomes by source.

[b]Amounts are determined from 300 families with two, three, or four family members.

[4]While two states' needs standards equal or exceed federal poverty thresholds, no state's payment level exceeds 85 percent of the poverty thresholds.

In the four counties sampled—which were primarily urban areas with higher average housing rents than those in the nationwide mix of urban and rural areas—the effect of housing subsidies was much more pronounced. Public and section 8 housing subsidies, at market value, to AFDC families averaged $422 in Alameda, California; $378 in Fulton, Georgia; $263 in Cuyahoga, Ohio; and $245 in Albany, New York. As shown in table 2.6, the average monthly income, at market value, of families receiving federal housing subsidies exceeded that of nonsubsidized AFDC families by $452 in Alameda, $332 in Fulton, $299 in Cuyahoga, and $176 in Albany.

Table 2.6: AFDC Families With Subsidized Housing Had Higher Incomes Than Those Without, April 1986[a]

	With housing	Without housing	Difference
Fulton	$1,012	$680	$332
Cuyahoga	1,050	751	299
Albany	1,023	847	176
Alameda	1,327	875	452

[a]Amounts are determined from 799 families with two, three, or four family members.

Public and section 8 housing assistance are not equally available in all parts of the country, or even within some states. Most eligible AFDC families do not receive such assistance. While we did not determine how many of our sample families were eligible but did not receive housing assistance, most families who do not own their homes likely would be eligible. Nationally, in fiscal year 1984, only about 6 percent of all AFDC family units owned their homes.

Earnings

Our national and county data showed that sampled AFDC families with earnings had higher total incomes than those without. However, because of the small number of families with earnings, we were only able to develop statistically valid results in Albany and Alameda counties. Table 2.9 shows that the average monthly income of AFDC families with earnings was significantly higher than that of AFDC families without earnings.

Table 2.7: AFDC Families With Earnings Had Higher Incomes Than Families Without Earnings, April 1986[a,b]

	Average monthly income			
	Albany, New York		Alameda, California	
Income source	With earnings	Without earnings	With earnings	Without earnings
Earnings	$308	$ •	$465	$ •
AFDC	307	407	388	522
Other	470	424	322	368
	$1,085	**$831**	**$1,175**	**$890**

[a]Amounts are based on aggregate data and should not be used to calculate average percentages of individual family incomes by source.

[b]Amounts are determined from 600 families with two, three, or four family members.

As reflected in table 2.7, although earnings result in higher total family incomes on average, families with earnings received lower AFDC benefits because earnings reduce AFDC benefits.

Family Size

Nationally and in the four counties sampled, the average monthly income increased substantially as the AFDC family size increased, as shown in tables 2.8 and 2.9.

Incomes increased with family size largely because AFDC family incomes came primarily from welfare benefits, which generally increase as the number of eligible family members increases.

Table 2.8: Nationally, Larger AFDC Families Had Higher Total Incomes, April 1984[a]

	Average monthly income			
	Market value technique		Recipient value technique	
Number of members in family	Income	Percent increase	Income	Percent increase
2	$655	•	$522	•
3	767	17	597	14
4	1,039	35	824	38
Percent of income increase from 2 to 4 members		59		58

[a]Amounts are determined from 300 families with two, three, or four family members.

Table 2.9: In the Four Counties, Larger AFDC Families Had Higher Total Incomes, April 1986[a]

Number of members in family	Average monthly income							
	Fulton		Cuyahoga		Albany		Alameda	
	Income	Percent increase	Income	Percent increase	Income	Percent increase	Income	Percent increase
2	$774	•	$603	•	$743	•	$801	•
3	950	23	820	36	963	30	1,057	32
4	1,099	16	1,084	32	1,159	20	1,272	20
Percent of income increase from 2 to 4 members		42		80		56		59

[a]Amounts are determined from 799 families with two, three, or four family members.

Comparison of AFDC Family Incomes With Poverty Line and Other Groups

National and county data show that AFDC family incomes rarely exceed the poverty line when only cash income (AFDC, earnings, etc.) is counted. But, their incomes frequently exceed the poverty line when in-kind benefits are valued at market and counted along with cash incomes. However, frequent criticisms of the poverty line as not indicating need and the controversy over valuing in-kind benefits, especially health care, suggest caution in interpreting the poverty statistics in this chapter.

Average monthly incomes for AFDC families are considerably lower than those of comparably sized families receiving welfare other than AFDC and families receiving no welfare. Thus, compared with these groups, a higher percentage of AFDC family incomes are below the poverty line. Further comparison showed that nationally,

- 8 percent of AFDC families had cash incomes exceeding poverty thresholds. Counting their in-kind benefits, except Medicaid, at market value increased the percentage to 26 percent, and at the recipient value to 21 percent. When Medicaid was included, these percentages further increased to 60 and 27, respectively. A similar pattern was apparent in the four sampled counties;
- the average monthly income for AFDC families, at market value, was $205 and $580 lower than the average incomes of comparably sized families in two welfare groups whose primary source of support was earnings or other cash nonwelfare income; and
- the average monthly income for AFDC families was $1,042 lower than that of single-parent families with three or fewer children not receiving welfare.

How AFDC Family Incomes Compare With the Poverty Line

Though comparing welfare family incomes with the official poverty line is a widely accepted measure of a families' economic status, the poverty line has been frequently criticized. Official poverty thresholds originated at the Social Security Administration in 1964. The poverty line was based on the U.S. Department of Agriculture's 1961 Economy Food Plan and sought to reflect consumption requirements based on family size and composition. The formula that produced the poverty line was derived from the Department of Agriculture's 1955 Survey of Food and Consumption, which found that families of three or more spend about a third of their income on food. Thus, the poverty line was set at three times the cost of the economy food plan. The official poverty thresholds have been updated annually since 1969 to reflect changes in the consumer price index, and they embody the only national standards for measuring basic living needs.

Frequent criticisms of the poverty line as not being a reliable indicator of need, include the following:

- The costs and spending patterns assumed by the poverty formula have changed. For instance, health care costs have risen much faster than the overall cost of living, and recent surveys have found low-income families spend less than one-third of their income on food.
- The poverty line does not reflect geographic and family differences other than family size. A 1984 study[1] showed that urban living costs can be higher than rural living costs, and families with two adults have higher costs than single-adult families of the same size.

Using national data, we compared the cash incomes of AFDC families and the additive effects of their in-kind assistance, at market and recipient values, against the poverty line. As figure 3.1 shows, counting in-kind benefit income—particularly medical benefits at market value—moved a considerable percentage of families above the poverty threshold. The figure also demonstrates the effect of the significant difference in values derived for Medicaid under the market value and recipient value methods.

A similar pattern was apparent in our sampled counties. Table 3.1 shows again the effect of including in-kind benefits at market value. Because the expenditure data were not available locally, we could not compute a recipient value for county data.

Table 3.1: What Is Counted as Income Determines How Many AFDC Families Have Incomes Exceeding Poverty Thresholds, April 1986[a,b]

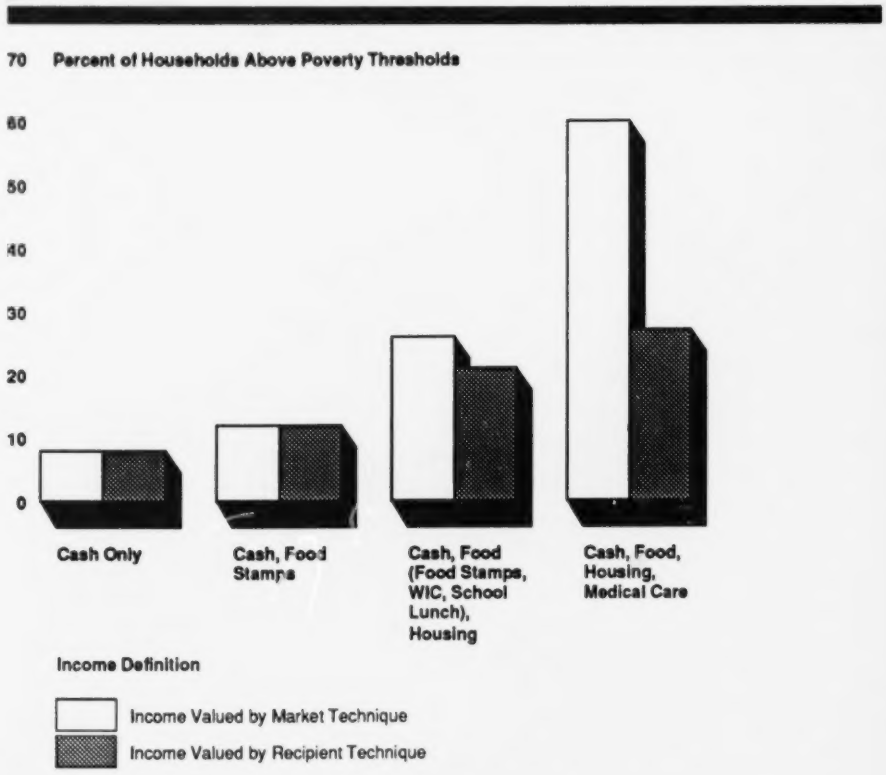
	Percent of AFDC families above poverty thresholds			
	Fulton	Cuyahoga	Albany	Alameda
Cash only	4	•	7	8
Cash, food stamps	5	2	14	12
Cash, food (food stamps, WIC, school lunch), housing	67	9	45	50
Cash, food, housing, medical care	77	67	96	97

[a]Amounts are determined from 799 families with two, three, or four family members.

[b]In-kind benefits are valued at market.

[1]Maurice MacDonald, Evaluating Alternatives Approaches to Measuring Basic Needs (Institute for Research on Poverty, University of Wisconsin, 1984).

Figure 3.1: What Is Counted as Income Determines How Many AFDC Family Incomes Exceed Poverty Thresholds, National Data, April 1984[a]



[a]Amounts are determined from 300 families with two, three, or four family members.

Among the in-kind benefits, Medicaid affected poverty status the most and is the most controversial to value. While Medicaid benefits significantly increase all AFDC families incomes, they can be spent only for medical care and not for such other basic needs as food and shelter that the poverty threshold was intended to represent. An Advisory Commission on Intergovernmental Relations[2] argued that, unlike food and housing needs, the health needs of families in comparable circumstances vary enormously depending on health status of household members. Some researchers believe the assumed income from medical benefits distorts perceptions about the economic well-being of recipients. Because of these potential distortions and the questionable use of the poverty line as an indicator, we feel that the information presented in this chapter is

[2]This commission was created by the Congress in 1959 to monitor the operation of the American federal system and to recommend improvements. It is a permanent national bipartisan body representing the executive and legislative branches of federal, state, and local governments and the public.

more useful for comparing differences between valuation techniques, as shown in figure 3.1, among locations, as shown in table 3.2, and recipient groups shown in figure 3.2 than comparing incomes with the poverty line.

How AFDC Family Incomes Compare With the Incomes of Other Welfare Groups

Nationally, over 18 percent of all households received some type of welfare benefit in April 1984. Of these households only one in five contained AFDC recipients. We compared AFDC family incomes to those of two types of households also receiving welfare benefits, but not AFDC or SSI.[3] The groups were

- single-parent families with one to three children under the age of 18 who are primarily self-supporting and receive such supplemental welfare assistance as food stamps or Medicaid, but not AFDC (93 percent of the AFDC population lives in single-parent families); and
- married couples with one or two children under age 18 who are primarily self-supporting and receive supplemental welfare assistance, but not AFDC (married-couple families constitute only about 7 percent of all AFDC families, but are the predominant family unit in the general population).

Like AFDC family incomes, the incomes of other welfare groups ranged widely. But the other groups had median and average incomes, at market value, that were higher than AFDC family median and average incomes. As table 3.2 shows, married- couple families had the highest monthly incomes.

Table 3.2: Monthly Incomes of Welfare Groups, National Data, April 1984[a,b]

Family	No. of families sampled	Bottom quarter	Median	Average	Top quarter[c]
AFDC	300	$631 or less	$759	$819	$917 or more
Single-parent	365	621 or less	893	1,024	1,167 or more
Married-couple	359	855 or less	1,206	1,399	1,730 or more

[a]Amounts are determined from families with two, three, or four members.

[b]In-kind benefits are valued at market value.

[c]The number and percentages of sampled families with monthly income over $2,000 are: AFDC—0 to 3 percent; single-parent—3 to 9 percent; married-couple—11 to 21 percent.

[3]We excluded SSI because the program assists the aged, blind, and disabled rather than families with children, which were used for our comparisons.

Relative to the other welfare groups, AFDC families received a larger portion of their income from welfare and in the form of in-kind benefits, as tables 3.3 and 3.4 show.

Table 3.3: Among Three Welfare Groups, AFDC Families Had the Highest Proportion of Welfare Income, National Data, April 1984[a]

Family	No. of families sampled	Average percent of monthly income—market value[b]	
		Welfare income	Other income
AFDC	300	92	8
Single-parent	365	22	78
Married-couple	359	13	87

[a]Amounts are determined from families with two, three, or four members.

[b]Percentages of individual family incomes by source were calculated and then averaged for all families.

Table 3.4: Among Three Welfare Groups, AFDC Families Had the Highest Proportion of In-Kind Benefits, National Data, April 1984[a]

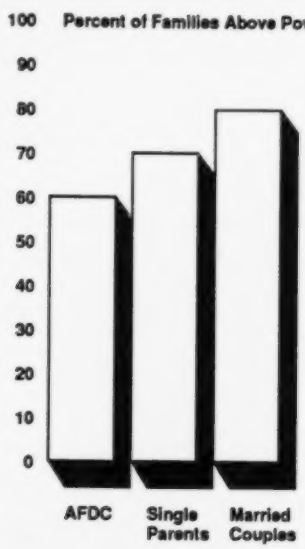
Family	No. of families sampled	Average percent of monthly income—market value[b]	
		Cash income	In-kind benefits
AFDC	300	50	50
Single-parent	365	78	22
Married-couple	359	87	13

[a]Amounts are determined from families with two, three, or four members.

[b]Percentages of individual family incomes by source were calculated and then averaged for all families.

Figure 3.2 shows that, nationally, 60 percent of AFDC families had incomes, at market value, exceeding poverty thresholds compared to 71 percent of single-parent families and 79 percent of married-couple families.

Figure 3.2: Among Three Welfare Groups, AFDC Families Exceed Poverty Thresholds Least Often, April 1984[a]



Note: Single-parent and married couple households receive welfare--but neither AFDC nor SSI. They contain from 2 to 4 members. Figures reflect national data. Inkind benefits are valued using market technique.

[a]Single-parent and married-couple families received welfare, but not AFDC or SSI. All families contain two to four members. Figures reflect national data. In-kind benefits are at market value.

How AFDC Family Incomes Compare With Incomes of Single-Parent Families Not Receiving Welfare

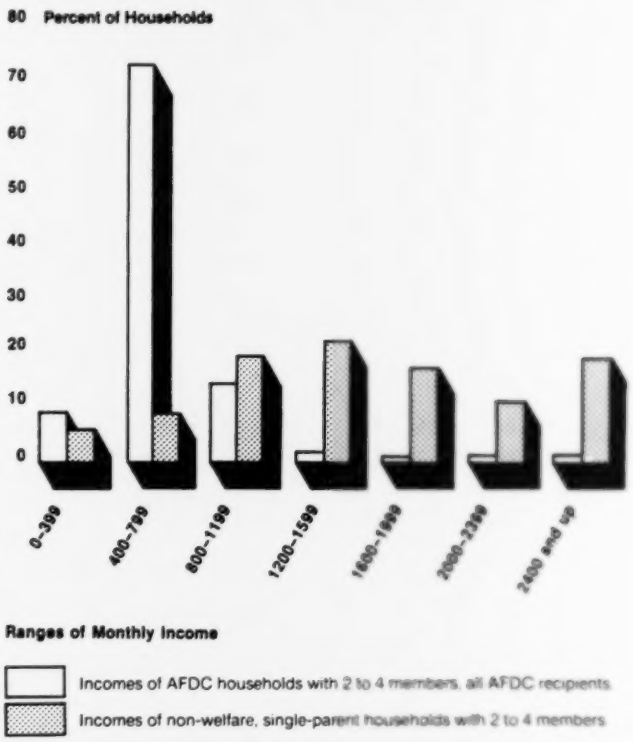
Studies show that single-parent families, as a group, have considerably lower incomes than married-couple and elderly families. To make our comparison, we used national data and selected single-parent families with three or fewer children who were not receiving any form of welfare. There were about 3.1 million of these families in April 1984.[4]

The average monthly pretax income, at market value, of the nonwelfare families was $1,709 (not including a value for employer-provided benefits, such as health care or pensions). If Medicaid is not included in AFDC family incomes, their average monthly income is $667, or $1,042 less than nonwelfare families. Fifty percent of the nonwelfare families had average monthly incomes between $1,039 and $2,137. Further, nonwelfare families derived most of their income from earnings, but also

[4]The Census Bureau's Survey of Income and Program Participation (SIPP) contains information on 15 of the largest welfare programs.

received income from such sources as interest and Social Security payments. We did not reduce incomes for taxes, which can be significant, especially for non-AFDC families. AFDC families with earnings would pay Social Security tax and may also pay some income tax, but welfare benefits are tax free. Figure 3.3 shows the respective incomes of AFDC and nonwelfare families.

Figure 3.3: Nationally, Most AFDC Families Had Significantly Lower Incomes Than Did Their Nonwelfare Counterparts, April 1984[a,b]



[a]Amounts are determined from 300 AFDC families and 644 nonwelfare families with two, three, and four family members.

[b]We did not include the value of employer or union-paid health insurance in the incomes of nonwelfare families. Therefore, we did not include a value for Medicaid in the incomes of AFDC families. In-kind benefits are at market value.

Eleven percent of the nonwelfare families had pretax incomes, not including employer-provided medical and pension benefits, that were below the poverty line, compared with 74 percent of AFDC families,

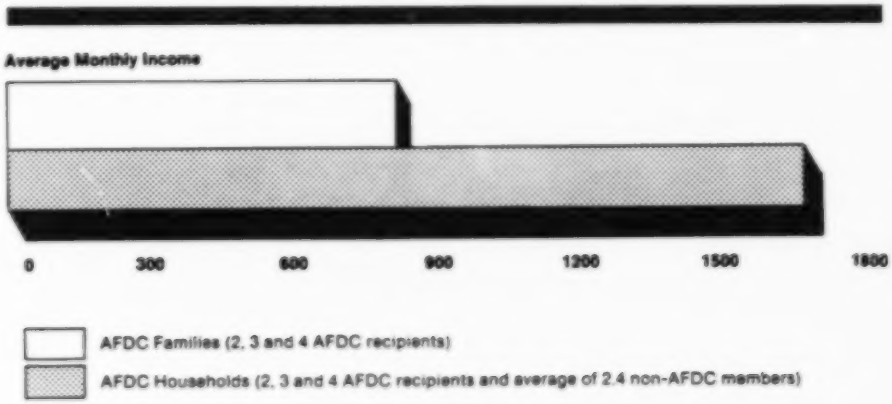
whose incomes were also computed without including Medicaid. Some nonwelfare families with low incomes may be "income-eligible" for welfare assistance, but do not participate for reasons that could include an inability to meet asset limitations, lack of knowledge about program eligibility, and the stigma attached to welfare.

Limited Information on Incomes of AFDC Families Living With Others

Our analysis of AFDC families living with persons not receiving AFDC and their income was limited by the absence of usable data. County welfare records often lacked income information on non-AFDC members' incomes. These records also lacked adequate identifying information such as Social Security numbers, which are needed to trace participation in other assistance programs. We were unable to accurately determine total income for households containing non-AFDC members at the county level. Therefore, for the analyses and comparisons in this section, we used only national data.

Nationally, 40 percent of sampled households with two to four AFDC recipients included persons not receiving AFDC. Such households had an average of 2.4 members in addition to the members who received AFDC. Figure 3.4 shows that the average monthly pretax income of households with 2, 3, and 4 AFDC recipients and an average of 2.4 non-AFDC members was $1,674, or $855 higher than AFDC families with 2, 3, and 4 recipients living alone.

Figure 3.4: Households With AFDC and Non-AFDC Members Have Higher Average Incomes Than AFDC Families Living Alone, National Data, April 1984[a]



[a]Market technique used to value in-kind benefits.

Besides average incomes being higher, households with AFDC and non-AFDC members have incomes above the poverty line more often than do AFDC families living alone, as table 3.5 shows.

Table 3.5: Comparison of Incomes Exceeding Poverty Thresholds Nationally, April 1984

	Percent	
Income definition	199 households with AFDC and non-AFDC members	300 AFDC families living alone
Cash Only	55	8
Cash plus in-kind benefits at recipient values	62	27
Cash plus in-kind benefits at market values	71	60

The average income of households with AFDC and non-AFDC members includes noticeably less in-kind income and more cash—primarily from earnings—than does the average income of AFDC families living alone, as table 3.6 shows.

Table 3.6: Income Composition of Households With AFDC and Non-AFDC Members and AFDC Families Living Alone, National Data, April 1984

	Average percent of income—market value[a]	
Income type	199 households with AFDC and non-AFDC members	300 AFDC families living alone
AFDC	20	41
Food stamps	8	18
Medicaid	13	19
Earnings	38	5
Other	21	17

[a]Percentages of individual family income by sources were calculated and then averaged for all families.

Our limited analysis of the income differences between AFDC families living alone and households with AFDC and non-AFDC members indicates that further study is needed to determine the relative income status of AFDC recipients in the two household types. Remaining unanswered is the question: How much income is available to support AFDC recipients? Answers to this and other questions can depend on the AFDC recipients' relationship to the non-AFDC household members. In response to Senator Roth's request dated March 31, 1987, we will provide further information on the incomes and characteristics of AFDC households in a later report.

Conclusions and Federal Welfare Policy Implications

AFDC families living alone receive income amounts from numerous welfare and nonwelfare sources. Most of their income is derived from federal/state welfare programs; on average almost half in the form of in-kind benefits. Thus, their incomes are affected by a multiplicity of federal and state policies concerning program eligibility, benefit levels and availability, and program interactions. Also, individual AFDC family incomes are affected by where they live, receipt of housing assistance, whether they have earnings, and family size.

Because individual state welfare policies and practices can play a significant role with respect to family incomes, the current extent of state discretion in setting AFDC payment levels, eligibility criteria, and so on is a necessary focus for welfare reform policy deliberations. To some extent, multiprogram participation and program interactions reduce AFDC payment variations among the states. AFDC payments are counted as income in determining the benefit amounts of such other programs as Food Stamp and Section 8 Housing. Thus, as AFDC payments become larger, benefits from the other programs become smaller. It is important, therefore, that in establishing benefit levels in a given welfare program, interactions with other program benefits are considered.

While earnings significantly affect the income of AFDC families with an employed member, few had earnings, which indicates the possible need for additional emphasis on training and work requirements.

AFDC family incomes increased with family size largely because their income came primarily from welfare benefits, which generally increase as the number of eligible family members increases.

National and county data indicate that some in-kind benefits may not be equitably distributed. Housing assistance, for example, can significantly affect an AFDC family's total income, but such assistance is not equally available in all states or even within some states. In effect some families, precluded from receiving such assistance, must pay for their housing at the market rate. Thus, families qualifying for assistance in similar circumstances are often treated differently. Attempts to address this apparent inequity might consider adjusting the AFDC grants for families not receiving housing assistance and/or adjusting the grants for those already receiving such assistance.

The number and percentage of AFDC families whose incomes exceed the poverty line are largely dependent on the types of in-kind benefits that are counted as income and the methods used to value them. Few AFDC

family incomes exceed the poverty line when their cash incomes alone are counted, but significantly more do when their in-kind assistance is counted—which serves to highlight the importance of methods used to value in-kind assistance in calculating individual and aggregate welfare income.

Although in-kind benefits comprise about 70 percent of federal welfare expenditures, there is disagreement about how such benefits should be valued for the purpose of determining incomes, and whether such benefits as Medicaid should be valued at all. At the request of the Congress, the Census Bureau is seeking to resolve a number of valuation issues, which, in our view, could significantly affect policymakers' perceptions about AFDC family incomes. However, until agreements are reached on these issues, uncertainties will persist about the relative poverty status of welfare families.

Although comparing welfare family incomes to the official poverty line is a widely accepted practice, the poverty line has received extensive criticism as being obsolete and nonreflective of geographic and family differences other than family size. While the poverty line remains the only commonly used national standard for measuring basic living needs income, the use of this standard continues to complicate efforts by the Congress and others to determine whether welfare benefits are adequate and properly targeted to the various poverty groups.

AFDC family incomes are generally less than comparably sized families receiving other welfare, such as food stamps but not AFDC, and those receiving no welfare. Thus, a higher percentage of AFDC families have incomes below the poverty line than do the other groups. A large percentage of AFDC family incomes are composed of in-kind assistance. Thus, in addition to being less fungible than those incomes consisting mostly of cash, AFDC family incomes are more susceptible to valuation problems.

Both national and county estimates of family incomes may be affected by program participation and income misreporting on Census Bureau surveys and to welfare agencies. Our estimates are subject to additional variations because of in-kind benefit valuation problems, and because we used monthly data that does not reflect annual labor force and welfare program participation effects.

Appendix I

Bureau of the Census Description of Noncash Valuation Techniques

This appendix contains descriptions of the procedures used to develop and assign values to each of the five types of noncash benefits valued in this study. These benefits are (1) food stamps, (2) school lunches, (3) public or other subsidized rental housing, (4) Medicaid, and (5) Medicare. The first section describes procedures for the market value approach; the second, procedures for the recipient or cash equivalent approach; and the third, procedures for the poverty budget share approach.

MARKET VALUE

The market value concept values the noncash benefit at the cost of the specific goods or services in the private market place. The procedures used to assign market values to noncash benefits require the identification of analogous goods or services in the private market place and estimation of the cost of the goods or services. Because it is sometimes difficult to find and value goods or services in the private market place that are precisely the same as those provided by the noncash benefit program, various assumptions and compromises were made in the estimation process. Details of the market value estimation process are contained in the following subsections for each noncash benefit.

Food stamps. Valuing food stamps was the simplest and most straightforward of the market value procedures. The market value assigned was the annual face value as reported in the survey; i.e., the face value is equal to the purchasing power of the food stamps in the market place.

School lunches. All children eating lunches prepared in schools that participate in the National School Lunch Program receive a subsidy or benefit because the price paid by the student is less than the cost of the meal. The value of the benefit varies depending on how much the student pays for the lunch. In the case of school lunches, it is difficult to identify the analogous good in the private market place since such a large proportion of schools participate in the program. It was decided, therefore, to assign market values that were equal to the amount of money and value of commodities contributed by the Department of Agriculture and State governments (excluding contributions directly from student payments for lunches).

Data from the Department of Agriculture allowed the calculation of the amount of contributions per meal served. These contributions differ for each of the three categories of lunches: (1) paid (full price), (2) reduced price, and (3) free. Table B-1 shows the total contributions per meal by type of lunch for 1979 to 1984. These figures were multiplied by 167 days to obtain an annual estimate per child. This assumes an average school year of 180 days and 93 percent attendance. These amounts were multiplied by the number of children in each family reporting that they usually ate a hot lunch offered at school.

Public and other subsidized rental housing. The noncash benefit for public or other subsidized rental housing was defined as the difference between the market rent of the housing unit and the subsidized or lower rent paid by the participant. The market value of the benefit is equal to this difference. Data on the market rent of public housing units are not readily available. Since these data are the key to estimating market values, procedures were developed to estimate market rents.

The market rent estimation procedure was based on survey data from the 1979 and 1981 Annual Housing Survey (AHS) national samples conducted by the Bureau of the Census. The AHS was chosen for several reasons. First, it collected rela-

Table B-1. Contributions per Meal and Annual Market Value Subsidies for National School Lunch Program, by Cost Status of Lunch: 1979-84

(Figures in 1984 dollars)

Cost status of lunch	1979		1980		1981		1982		1983		1984	
	Per meal	Annual	Per meal	Annual	Per meal	Annual	Per meal	Annual	Per meal	Annual	Per meal	Annual
Full price.....	.44	74.07	.43	71.56	.37	61.02	.25	41.33	.25	41.28	.25	41.75
Reduced price..	1.20	200.70	1.20	199.95	1.13	188.79	.90	150.94	.93	154.82	.93	158.65
Free.....	1.49	248.49	1.45	242.04	1.36	226.93	1.33	222.82	1.34	223.62	1.35	225.45

Note: For the 1984 per meal cost status of lunch shown in the reproduced table B-1, we deducted the 25-cent subsidy that all children receive from the reduced price and free lunch subsidy amounts to derive the portion of the subsidies that is based on financial need.

tively current data on monthly amounts paid for rent and utilities. Second, it allowed identification of public or other subsidized housing units. Third, the AHS had a relatively large sample size, about 60,000 households. Finally, the survey can provide data needed for future updates.

The first step in the market rent estimation procedure was development of a method to "statistically" match public and private market rental units with similar housing characteristics. In this process, each sample public or subsidized housing unit was matched to two nonsubsidized units with similar housing unit characteristics. The average market rent for two matching private market units was assigned as the market rent for each matching public or other subsidized rental unit. The average market rent for two nonsubsidized units was assigned rather than a rental amount from only one unit in order to help stabilize the estimated market rents.

Once the assignment of a market rent had been made to each public or subsidized rental housing unit on the 1979 and 1981 AHS sample files, tabulations of average market rents and average subsidized rents paid were made. An examination of these data indicated that the data for both years should be combined in order to provide larger sample sizes and thus more stable estimates for the market and subsidized rents.

The tabulation and combination of the market rent and subsidized rent data for 1979 and 1981 were followed by the calculation of average market values for the rent subsidy. These averages were simply the difference between the average simulated market rents and the average reported subsidized rents paid. Tables B-2, B-3, and B-4 show the average market rents, average subsidized rents, and average market value subsidies used in the assignment of market values for public housing. The values in these tables are averages derived by combining the 1979 and 1981 data. The averages were replaced by rent-to-income ratios for purposes of making the actual calculation.

Market value estimates for public housing described here differ somewhat from those used in the original Technical Paper 50 work because slightly different procedures were used. The original work covering 1979 used data from the 1979 AHS; however, valuation techniques based on hedonic regression procedures yielded lower estimates of market rent for the public housing units and thus lower market values for the noncash housing benefit.

The rent-to-income ratios used in the assignment of the market value subsidy were held constant for all years. This meant that the market value subsidy for public housing was fixed as a function of income level based on the combined 1979 and 1981 data. This procedure yielded market value subsidies that changed only slightly over the period.

Table B-2. Mean Annual Market Rent for Public or Other Subsidized Housing Units, by Total Household Money Income and Size of Family Unit

(Figures in dollars. Combined data from the 1979 and 1981 Annual Housing Survey)

Size of family unit	Total household money income							
	Less than $5,000	$5,000 to $7,499	$7,500 to $9,999	$10,000 to $12,499	$12,500 to $14,999	$15,000 to $17,499	$17,500 to $19,999	$20,000 or more
Householder 65 years and over:								
One person	2,675	3,211	3,597	2,884	3,841	2,388	2,344	2,648
Two persons or more	3,049	3,208	3,158	3,728	3,472	3,604	3,627	5,068
Householder under 65 years in—								
Married-couple family households:								
Two persons	2,894	3,203	3,583	3,432	3,995	4,009	3,822	3,924
Three persons	3,316	3,268	3,539	3,612	3,723	4,364	4,355	4,570
Four persons	3,450	3,470	3,680	4,047	3,858	3,623	4,313	3,922
Five persons	4,264	3,533	3,962	3,590	4,155	4,194	4,578	3,642
Six persons	3,924	3,699	4,004	3,388	3,001	4,313	3,764	5,129
Seven persons or more	4,025	3,009	4,720	3,110	4,809	3,685	4,290	5,880
Other family households:								
Two persons	3,185	3,500	3,297	3,831	3,831	4,424	4,418	4,284
Three persons	3,305	3,478	4,190	3,882	3,528	3,726	3,534	4,068
Four persons	3,386	3,450	3,691	4,319	4,527	4,192	6,994	4,498
Five persons	3,325	3,481	3,321	3,933	3,388	4,908	4,481	4,020
Six persons	3,111	3,298	4,381	4,122	5,658	4,826	3,389	3,414
Seven persons or more	3,341	3,712	4,980	3,994	5,278	5,748	4,294	2,646
Nonfamily households:								
One person	2,678	3,073	3,312	3,323	3,262	3,011	6,468	4,824
Two persons	3,489	4,378	4,183	4,440	3,498	3,407	9,120	3,490
Three persons or more	5,670	5,082	5,005	4,624	3,648	4,122	2,322	3,594

Table B-3. Mean Annual Subsidized Rent for Public or Other Subsidized Housing Units, by Total Household Money Income and Size of Family Unit

(Figures in dollars. Combined data from the 1979 and 1981 Annual Housing Surveys)

Size of family unit	Total household money income							
	Less than $5,000	$5,000 to $7,499	$7,500 to $9,999	$10,000 to $12,499	$12,500 to $14,999	$15,000 to $17,499	$17,500 to $19,999	$20,000 or more
Householder 65 years and over:								
One person	1,058	1,541	2,217	1,942	1,145	1,632	1,631	1,885
Two persons or more	1,290	1,518	2,066	2,172	2,102	2,232	3,032	3,171
Householder under 65 years in--								
Married-couple family households:								
Two persons	1,454	1,990	2,249	2,428	2,285	3,013	2,953	3,092
Three persons	2,111	1,933	2,433	2,549	2,869	2,984	3,333	2,928
Four persons	1,794	1,849	2,256	2,481	2,451	2,976	3,607	2,799
Five persons	1,945	1,859	2,081	2,243	2,469	2,642	3,358	2,538
Six persons	1,696	1,852	2,203	2,335	1,947	3,224	2,423	3,792
Seven persons or more	1,492	1,652	1,959	1,976	3,691	2,242	2,493	3,553
Other family households:								
Two persons	1,482	1,552	2,119	2,688	2,749	2,912	2,933	3,332
Three persons	1,344	1,863	2,150	2,265	2,394	3,157	2,331	2,297
Four persons	1,434	1,976	2,055	3,141	3,703	2,289	2,493	1,845
Five persons	1,352	1,903	1,869	2,832	1,728	2,400	2,756	3,494
Six persons	1,387	1,494	1,541	1,908	3,324	2,665	1,591	2,375
Seven persons or more	1,264	1,763	2,007	1,595	1,746	2,616	2,006	1,380
Nonfamily households:								
One person	1,232	1,618	2,237	2,286	2,620	2,219	5,784	3,142
Two persons	1,585	2,900	2,590	2,424	2,304	2,482	3,204	3,011
Three persons or more	2,820	1,464	1,794	2,239	2,808	3,480	708	2,640

Table B-4. Mean Annual Market Value of Housing Subsidies for Public or Other Subsidized Housing Units, by Total Household Money Income and Size of Family Unit

(Figures in dollars. Combined data from the 1979 and 1981 Annual Housing Surveys)

Size of family unit	Total household money income							
	Less than $5,000	$5,000 to $7,499	$7,500 to $9,999	$10,000 to $12,499	$12,500 to $14,999	$15,000 to $17,499	$17,500 to $19,999	$20,000 or more
Householder 65 years and over:								
One person	1,617	1,670	1,380	942	696	756	713	763
Two persons or more	1,760	1,690	1,092	1,556	1,370	1,371	595	1,897
Householder under 65 years in--								
Married-couple family households:								
Two persons	1,440	1,213	1,334	1,003	1,711	996	869	832
Three persons	1,205	1,335	1,106	1,063	853	1,380	1,023	1,642
Four persons	1,656	1,621	1,424	1,567	1,406	647	707	1,123
Five persons	2,318	1,675	1,881	1,347	1,686	1,553	1,220	1,105
Six persons	2,228	1,847	1,800	1,053	1,054	1,089	1,341	1,337
Seven persons or more	2,532	1,357	2,761	1,134	1,117	1,444	1,796	2,327
Other family households:								
Two persons	1,703	1,948	1,178	1,144	1,082	1,512	1,485	953
Three persons	1,961	1,615	2,040	1,618	1,134	569	1,203	1,771
Four persons	1,952	1,474	1,635	1,177	824	1,903	4,501	2,653
Five persons	1,972	1,578	1,452	1,101	1,660	2,508	1,706	526
Six persons	1,724	1,804	2,840	2,214	2,334	2,161	1,798	1,039
Seven persons or more	2,077	1,950	2,973	2,399	3,531	3,132	2,288	1,266
Nonfamily households:								
One person	1,446	1,455	1,074	1,037	642	792	684	1,683
Two persons	1,903	1,478	1,593	2,016	1,194	925	5,916	479
Three persons or more	2,850	3,618	3,211	2,385	840	642	1,614	954

Medicare and Medicaid. Procedures used to assign the market value of Medicare and Medicaid coverage are based on an insurance value concept. A major problem in the assignment of market values is the identification of a comparable good in the private market and estimation of the cost of the comparable good. The comparable private market, in the case of Medicare and Medicaid, would be nonprofit insurance companies charging premium amounts that cover the cost of benefits and overhead.

In the absence of a similar private market, the market values of Medicare and Medicaid were determined using program data covering the total amount of medical vendor payments and numbers of persons covered or enrolled in the program, including those covered but not receiving medical care benefits from the program.

The market values for Medicare are shown in table B-5 for 1979 and 1984. These values were obtained by dividing medical benefits paid by the number of enrollees. All calculations of market value were made separately by State and risk class. As can be seen in the table, the Medicare risk classes were the aged (persons over age 65) and the disabled. Supplemental medical insurance (SMI) premiums were assumed to be paid by all enrollees and were, therefore, deducted in the market value calculation process. These amounts of SMI premiums *have not* been deducted from the values shown in table B-5. The data in these tables include expenditures for the institutionalized population. The market values based on vendor payments that exclude institutional expenditures were estimated to be about 2 percent lower in all States even though this factor differed slightly from State to State. Unlike the earlier study, no adjustment was made to the average value to account for small amounts of program administrative costs. All of the data used in the estimation of the market value of Medicare are available from the Health Care Financing Administration (HCFA), Department of Health and Human Services.

The market values for Medicaid are shown in tables B-6 and B-7 for 1979 and B-8 and B-9 for 1984. Separate market values based on inclusion and exclusion of institutional expenditures have been provided to illustrate the large differences in market values resulting from the exclusion or inclusion of benefits paid on behalf of institutionalized individuals. Four risk classes were defined for estimating the market value of Medicaid. These were aged, blind or disabled, dependent children under age 21, and adults aged 21 to 64. The calculations for the child and adult risk classes were restricted to expenditures and recipients in Aid to Families with Dependent Children (AFDC) units. Calculations excluded the "other title XIX" recipients and benefits as shown in the annual HCFA tabulation.

The computation of market values for Medicaid was *not* made based on the "ever enrolled" population. Estimating ever enrolled populations within risk class and State for Medicaid is difficult. There are no administrative or survey data available that can be used to develop accurate ever enrolled figures and the figures on those receiving benefits are weak for some States, often requiring revision. An examination of estimates of market value based on recipients of Medicaid benefits with market value estimates based on the ever enrolled figures derived for the original Technical Paper 50 study covering 1979 showed relatively small differences for most States, but large differences for a few States. These apparent problems were traced to major revisions to the HCFA Medicaid data following completion of the original valuation work. Considering the relatively small differences for most States, the problems in obtaining an adequate ever enrolled estimate, and the major revisions made to the 1979 Medicaid data, it was decided to compute the market values for Medicaid based on estimated recipient counts readily available from HCFA. Use of this procedure may overstate the value somewhat but provides a more consistent and stable data base for the examination of the effect of noncash benefits on changes in poverty levels during the 1979 to 1984 period. Administrative costs were also excluded in the calculation of Medicaid benefits.

RECIPIENT OR CASH EQUIVALENT VALUE

The recipient or cash equivalent concept attempts to assign a value to the noncash benefit that would make the recipient feel just as well off as the noncash benefit itself. This concept reflects the value the recipient places on the benefit. The recipient or cash equivalent concept assures that the value assigned never exceeds the market value and is, in most cases, less than the market value.

Two procedures have been used by researchers to estimate recipient values. These are the utility function approach and the normal expenditures approach. Both of these approaches have advantages and disadvantages. The major problem in either case, however, is a lack of data needed to adequately estimate recipient value accurately. A more detailed discussion of the recipient value concept and problems of estimation is contained in Technical Paper 50.

The normal expenditure approach was used to estimate recipient values in this study. The first step in this technique is to obtain expenditure data for households purchasing the good or service in the private market. In this valuation effort, the general procedure was to tabulate an average annual household expenditure matrix defined by a set of cross-classifying variables. The next step was comparison of the previously assigned market value of the noncash benefit to the average (normal) expenditure in the appropriate cell of this matrix. The recipient value assigned was equal to the average value in the matrix unless this value is greater than the market value. In this situation, the recipient value is constrained, making it equal to the market value.

Food stamps. The recipient or cash equivalent values for food stamps were based on data from the Consumer Expenditure Survey (CES) diary sample. The CES is conducted by the Bureau of the Census under the sponsorship of the Bureau of Labor Statistics. Since this survey has a relatively small sample size, it was necessary to combine expenditure data for 1980, 1981, and 1982 in order to improve the stability of the normal expenditure matrix. Table B-10 shows the figures used in the assignment of recipient value for food stamps. These figures include both food consumed at home and away from home. In practice, the average subsidy amounts were replaced by subsidy-to-

Table B-5. Annual Market Value for Medicare, by State and Risk Class: 1979 and 1984

(Figures in 1984 dollars)

State	1979 risk class		1984 risk class	
	Age 65 and over	Blind and disabled	Age 65 and over	Blind and disabled
United States	1,329	1,670	1,672	2,120
Alabama	1,098	1,890	1,440	1,796
Alaska	1,524	2,413	1,602	2,489
Arizona	1,244	1,942	1,621	1,998
Arkansas	987	1,693	1,043	1,450
California	1,727	2,652	2,267	2,779
Colorado	1,281	2,039	1,592	1,880
Connecticut	1,391	2,051	1,967	2,368
Delaware	1,337	1,962	1,775	1,845
District of Columbia	1,959	3,301	3,032	3,998
Florida	1,417	2,364	1,761	2,295
Georgia	1,010	1,699	1,417	1,844
Hawaii	1,289	1,826	1,885	2,566
Idaho	977	1,547	1,035	1,496
Illinois	1,528	2,397	2,139	2,643
Indiana	1,146	1,928	1,597	1,912
Iowa	1,108	1,815	1,498	1,675
Kansas	1,285	2,111	1,976	1,874
Kentucky	944	1,633	1,086	1,473
Louisiana	1,069	1,804	1,185	1,724
Maine	1,212	1,952	1,464	1,641
Maryland	1,574	2,454	2,088	2,535
Massachusetts	1,663	2,530	1,768	2,311
Michigan	1,611	2,537	2,034	2,175
Minnesota	1,211	1,877	1,793	1,797
Mississippi	1,006	1,694	1,118	1,775
Missouri	1,302	2,154	1,474	1,978
Montana	1,027	1,699	1,201	1,253
Nebraska	1,122	1,734	1,654	1,678
Nevada	1,598	2,672	2,120	2,180
New Hampshire	1,122	1,869	1,561	1,657
New Jersey	1,365	2,217	1,875	2,740
New Mexico	1,099	1,820	1,146	1,465
New York	1,470	2,325	1,719	2,299
North Carolina	962	1,574	1,342	1,623
North Dakota	1,246	2,165	1,427	2,182
Ohio	1,269	2,147	1,635	1,818
Oklahoma	1,133	1,892	1,213	1,742
Oregon	1,209	1,953	1,377	1,733
Pennsylvania	1,378	2,325	1,786	2,462
Rhode Island	1,498	2,171	1,682	1,672
South Carolina	866	1,583	1,290	1,571
South Dakota	1,012	1,809	1,392	1,276
Tennessee	1,043	1,782	1,334	1,761
Texas	1,241	2,086	1,498	2,462
Utah	1,010	1,527	1,281	1,742
Vermont	1,122	1,806	1,396	1,563
Virginia	1,129	1,804	1,492	2,009
Washington	1,115	1,749	1,315	1,853
West Virginia	996	1,759	1,011	1,351
Wisconsin	1,212	1,972	1,550	1,788
Wyoming	1,035	1,822	1,208	1,653

Table B-6. Annual Market Values for Medicaid Including Institutional Expenditures, by State and Risk Class: 1979

(Figures in 1984 dollars)

State	Age 65 and over	Blind and disabled	Age 21-64, nondisabled	Age less than 21, nondisabled
United States	2,999	3,671	1,006	477
Alabama	1,694	1,604	830	328
Alaska	6,445	5,914	1,029	418
Arizona	2,999	3,671	1,006	477
Arkansas	1,952	2,407	727	338
California	1,939	2,185	963	475
Colorado	2,865	5,511	916	341
Connecticut	6,233	4,402	1,025	515
Delaware	5,114	3,698	806	358
District of Columbia	2,828	4,993	1,365	731
Florida	1,908	1,742	763	388
Georgia	2,129	2,506	926	371
Hawaii	3,754	3,492	912	402
Idaho	3,766	4,443	814	411
Illinois	3,775	4,253	1,095	497
Indiana	5,697	5,946	1,049	424
Iowa	3,889	5,029	997	462
Kansas	3,593	5,459	894	346
Kentucky	1,681	1,855	647	289
Louisiana	2,011	2,643	737	331
Maine	3,130	1,703	645	329
Maryland	3,628	2,451	1,022	545
Massachusetts	1,938	4,616	1,168	525
Michigan	3,985	5,020	1,372	522
Minnesota	5,638	6,324	933	399
Mississippi	1,328	1,666	575	268
Missouri	1,877	2,219	747	311
Montana	4,500	3,902	967	386
Nebraska	3,997	4,957	944	439
Nevada	3,864	5,063	973	409
New Hampshire	5,504	3,925	790	439
New Jersey	5,644	3,771	934	574
New Mexico	1,893	2,385	787	333
New York	5,282	8,589	1,547	788
North Carolina	2,231	2,712	783	326
North Dakota	4,754	3,844	1,161	548
Ohio	4,150	3,575	893	368
Oklahoma	2,886	4,345	551	399
Oregon	3,685	4,206	584	230
Pennsylvania	4,672	3,406	738	355
Rhode Island	3,115	2,989	727	345
South Carolina	2,240	1,756	760	246
South Dakota	4,171	5,235	850	379
Tennessee	2,281	2,244	864	434
Texas	2,680	3,743	1,113	382
Utah	3,831	5,152	947	608
Vermont	3,673	3,925	780	412
Virginia	2,999	2,994	916	406
Washington	3,250	4,808	907	401
West Virginia	1,274	1,274	1,274	1,274
Wisconsin	5,027	5,063	824	422
Wyoming	4,974	3,150	780	280

Table B-7. Annual Market Values for Medicaid Including Institutional Expenditures, by State and Risk Class: 1984

(Figures in dollars)

State	Age 65 and over	Blind and disabled	Age 21-64, nondisabled	Age less than 21, nondisabled
United States	4,037	4,124	859	430
Alabama	1,696	2,116	720	308
Alaska	7,604	10,422	1,272	666
Arizona	4,037	4,124	859	430
Arkansas	2,303	3,068	795	425
California	1,653	2,535	722	384
Colorado	3,013	5,402	829	364
Connecticut	7,828	6,736	1,073	512
Delaware	5,253	4,421	758	389
District of Columbia	7,075	4,217	597	315
Florida	2,810	2,765	585	281
Georgia	2,265	2,758	1,013	404
Hawaii	4,792	3,741	890	378
Idaho	4,759	5,212	890	398
Illinois	3,561	4,085	860	427
Indiana	6,109	6,348	1,270	522
Iowa	3,594	5,080	856	447
Kansas	2,458	3,436	558	317
Kentucky	2,269	2,108	591	287
Louisiana	2,615	4,310	1,030	450
Maine	4,766	3,911	820	376
Maryland	5,353	2,877	1,100	590
Massachusetts	4,610	5,325	1,118	597
Michigan	4,301	4,391	954	368
Minnesota	7,579	10,682	896	430
Mississippi	1,906	1,737	754	338
Missouri	3,267	3,160	733	418
Montana	3,722	2,505	901	301
Nebraska	4,246	5,303	832	468
Nevada	3,853	5,981	977	523
New Hampshire	6,564	5,596	539	281
New Jersey	5,999	4,897	1,045	439
New Mexico	2,976	3,650	1,072	422
New York	8,921	7,214	986	610
North Carolina	3,783	4,443	902	429
North Dakota	5,964	6,469	923	646
Ohio	5,264	5,140	962	467
Oklahoma	3,014	3,675	1,002	692
Oregon	3,894	4,892	936	338
Pennsylvania	5,446	4,864	733	361
Rhode Island	5,291	5,398	681	321
South Carolina	2,310	2,231	540	172
South Dakota	4,894	7,007	954	527
Tennessee	2,656	2,561	1,036	607
Texas	2,687	4,585	1,112	419
Utah	3,792	6,261	858	374
Vermont	4,485	5,193	812	372
Virginia	4,003	3,724	822	337
Washington	3,848	4,734	885	442
West Virginia	2,383	1,215	467	216
Wisconsin	5,087	5,189	734	427
Wyoming	4,967	3,856	926	429

Table B-8. Annual Market Values for Medicaid Excluding Institutional Expenditures, by State and Risk Class: 1979

(Figures in 1984 dollars)

State	Age 65 and over	Blind and disabled	Age 21-64, nondisabled	Age less than 21, nondisabled
United States	597	1,813	995	449
Alabama	429	1,129	830	328
Alaska	695	1,587	1,025	388
Arizona	597	1,813	995	449
Arkansas	451	995	727	336
California	658	1,701	963	472
Colorado	474	1,503	913	312
Connecticut	781	1,932	993	468
Delaware	588	1,713	806	358
District of Columbia	1,803	3,662	1,364	705
Florida	635	1,379	763	388
Georgia	531	1,461	926	371
Hawaii	711	1,617	910	401
Idaho	584	1,551	814	411
Illinois	761	2,189	1,092	494
Indiana	793	2,251	1,045	401
Iowa	675	1,491	987	462
Kansas	529	1,221	892	329
Kentucky	319	1,065	645	286
Louisiana	602	1,052	737	328
Maine	402	1,171	644	328
Maryland	675	1,895	1,019	545
Massachusetts	248	2,169	1,159	507
Michigan	610	2,530	1,345	455
Minnesota	757	1,832	927	395
Mississippi	475	1,115	574	258
Missouri	479	1,224	747	311
Montana	627	2,018	963	385
Nebraska	704	1,724	940	415
Nevada	654	2,809	973	402
New Hampshire	671	2,003	790	431
New Jersey	703	1,902	934	451
New Mexico	495	1,560	786	332
New York	740	3,648	1,508	705
North Carolina	607	1,618	781	322
North Dakota	601	2,252	1,161	548
Ohio	630	1,617	893	365
Oklahoma	664	1,182	541	384
Oregon	522	1,042	584	230
Pennsylvania	448	1,274	697	322
Rhode Island	1,113	1,382	727	345
South Carolina	368	950	753	246
South Dakota	451	1,282	850	379
Tennessee	514	1,219	863	424
Texas	568	1,468	1,113	382
Utah	514	1,425	943	446
Vermont	592	1,847	756	375
Virginia	754	1,607	913	372
Washington	685	1,943	906	401
West Virginia	456	1,025	1,272	1,268
Wisconsin	887	1,920	810	395
Wyoming	356	1,465	778	255

Table B-9. Annual Market Values for Medicaid Excluding Institutional Expenditures, by State and Risk Class: 1984

(Figures in dollars)

State	Age 65 and over	Blind and disabled	Age 21-64, nondisabled	Age less than 21, nondisabled
United States	1,016	2,550	851	417
Alabama	458	1,016	720	308
Alaska	2,589	3,834	1,236	659
Arizona	1,016	2,550	851	417
Arkansas	745	1,283	795	423
California	520	1,928	721	382
Colorado	727	2,524	799	347
Connecticut	1,102	5,271	1,066	504
Delaware	642	1,855	758	389
District of Columbia	1,324	2,638	594	305
Florida	742	1,507	585	281
Georgia	794	1,452	856	346
Hawaii	837	2,602	889	378
Idaho	490	1,788	890	398
Illinois	856	4,204	962	469
Indiana	905	3,181	1,270	518
Iowa	650	1,716	856	435
Kansas	469	2,020	558	305
Kentucky	396	1,634	590	272
Louisiana	890	1,812	1,029	440
Maine	760	1,918	792	343
Maryland	997	2,563	1,078	589
Massachusetts	1,702	3,647	1,117	596
Michigan	835	3,477	952	327
Minnesota	915	4,249	935	436
Mississippi	603	1,057	754	338
Missouri	648	1,532	732	411
Montana	492	1,442	900	300
Nebraska	828	3,538	831	460
Nevada	622	3,671	977	523
New Hampshire	579	3,161	537	281
New Jersey	1,019	2,439	1,045	439
New Mexico	724	2,184	1,068	422
New York	2,789	5,652	980	580
North Carolina	899	3,169	900	422
North Dakota	555	3,801	1,088	595
Ohio	1,204	2,538	962	465
Oklahoma	970	4,758	885	578
Oregon	830	1,493	828	338
Pennsylvania	552	2,228	677	343
Rhode Island	1,859	2,055	681	321
South Carolina	462	960	540	172
South Dakota	681	3,436	954	527
Tennessee	552	1,384	1,034	527
Texas	902	1,790	1,111	419
Utah	605	1,939	855	365
Vermont	831	3,157	788	367
Virginia	922	1,965	820	335
Washington	677	1,993	884	440
West Virginia	417	871	467	216
Wisconsin	823	1,828	725	390
Wyoming	334	2,675	926	429

Table B-10. Mean Annual Normal Expenditures for Food, by Total Household Money Income and Size of Family Unit

(Figures in dollars. Combined data from 1980, 1981, and 1982 Current Expenditure Survey Monthly Diaries)

Size of family unit	Total household money income							
	Less than $5,000	$5,000 to $7,499	$7,500 to $9,999	$10,000 to $12,499	$12,500 to $14,999	$15,000 to $17,499	$17,500 to $19,999	$20,000 or more
Householder 65 years and over:								
One person	1,015	1,328	1,464	1,683	1,396	1,676	2,370	2,293
Two persons or more	1,414	1,806	2,143	2,536	2,556	2,383	2,810	3,577
Householder under 65 years in—								
Married-couple family households:								
Two persons	648	1,916	2,103	2,465	2,369	2,842	2,921	3,293
Three persons	344	2,683	2,308	2,395	2,612	3,036	2,912	3,716
Four persons	621	2,774	2,521	2,902	2,791	3,278	3,334	4,352
Five persons	931	2,159	3,119	3,091	3,299	2,778	4,319	4,864
Six persons	1,000	2,188	2,517	3,582	3,710	4,226	4,058	5,303
Seven persons or more	1,250	2,938	3,914	4,642	4,291	5,191	4,563	5,570
Other family households:								
Two persons	991	1,472	1,769	1,782	2,539	2,732	2,468	2,938
Three persons	1,404	2,177	1,719	2,329	2,958	3,250	3,272	3,566
Four persons	1,125	2,203	2,009	2,958	3,491	2,913	2,316	4,772
Five persons	931	2,159	3,119	3,091	3,299	2,778	4,319	4,864
Six persons	1,000	2,188	2,517	3,582	3,710	4,226	4,058	5,303
Seven persons or more	1,250	2,938	3,914	4,642	4,291	5,191	4,563	5,570
Nonfamily households:								
One person	714	1,123	1,303	1,600	1,637	1,782	2,123	2,626
Two persons or more	999	1,799	2,265	2,386	2,097	2,052	2,339	3,561

income ratios in order to compute recipient values. These ratios are shown in table B-11 and were used in the estimation process throughout the 1979-84 period.

Since food stamps may have been received for a specified number of months during the year, the calculation of recipient value should be based only on the months during which the stamps were received. Data collected in the March CPS on the number of months received were used to account for these part-year recipients. This was accomplished by transforming the average annual normal food expenditures and market value of food stamps to average monthly figures. In these cases, if the average monthly normal expenditure was less than the average monthly food stamp amount, the annual recipient value was made equal to the average monthly normal expenditure multiplied by the number of months in which food stamps were received. If the monthly normal expenditure was greater than the market value, the annual recipient value equaled the annual market value of food stamps.

School lunches. Estimating normal expenditures for school lunches is difficult since virtually all school children eating lunches prepared at school are participating in the program; i.e., there is no private market from which to estimate normal expenditures. Given this problem and the relatively small size of the benefits, a decision was made to assign recipient values to school lunch benefits that were equal to the market value of these benefits.

Public or other subsidized rental housing. Estimates of recipient value for public housing tenants were based on data from the 1979 and 1981 Annual Housing Survey as were the estimates of market value. The first step in the procedure was tabulation of average or normal annual rental expenditures in the private market place—in this case, rental units in nonpublic housing. Data for 1979 and 1981 were combined to increase the sample size in order to stabilize the average rental amounts. The normal expenditure estimates tabulated for the recipient value calculations are shown in table B-12.

The second step, calculation of recipient value for public housing, is somewhat more complicated than for food stamps because the recipients pay a reduced price rather than obtaining the goods at no cost. First, the market rent established as part of the market value procedures (table B-2) was compared to the appropriate normal expenditures figure in table B-12. If the market rent figure was less than the normal expenditure, the recipient value was assigned to be equal to the market value of the benefit. If the market rent figure was greater than the normal expenditure, the recipient value was determined as the difference between the normal expenditure and the subsidized rental payment (table B-4). In practice, the average figures shown

Table B-11. Annual Food Expenditure-to-Income Ratios, by Total Household Money Income and Size of Family Unit

(Combined data from 1980, 1981, and 1982 Current Expenditure Survey Monthly Diaries)

Size of family unit	Total household money income							
	Less than $5,000	$5,000 to $7,499	$7,500 to $9,999	$10,000 to $12,499	$12,500 to $14,999	$15,000 to $17,499	$17,500 to $19,999	$20,000 or more
Householder 65 years and over:								
One person	.286	.221	.170	.149	.102	.102	.128	.074
Two persons or more	.399	.284	.244	.228	.186	.148	.151	.103
Householder under 65 years in--								
Married-couple family households:								
Two persons	.480	.286	.237	.222	.172	.177	.156	.093
Three persons	.391	.411	.274	.215	.190	.188	.155	.107
Four persons	.409	.419	.282	.256	.206	.202	.179	.123
Five persons	.378	.332	.365	.270	.241	.172	.232	.138
Six persons	.400	.350	.274	.327	.270	.262	.216	.142
Seven persons or more	.500	.470	.435	.417	.312	.315	.239	.160
Other family households:								
Two persons	.342	.244	.201	.160	.186	.170	.132	.098
Three persons	.490	.344	.200	.210	.213	.203	.176	.119
Four persons	.450	.374	.225	.263	.255	.179	.121	.167
Five persons	.378	.332	.365	.270	.241	.172	.232	.138
Six persons	.400	.350	.274	.327	.270	.262	.216	.142
Seven persons or more	.500	.470	.435	.417	.312	.315	.239	.160
Nonfamily households:								
One person	.266	.183	.152	.144	.120	.112	.115	.088
Two persons or more	.340	.280	.252	.209	.150	.128	.129	.103

Table B-12. Mean Annual Normal Expenditures for Rental Units in Nonsubsidized Housing, by Total Household Money Income and Size of Family Unit

(Figures in dollars. Combined data from 1979 and 1981 Annual Housing Survey)

Size of family unit	Total household money income							
	Less than $5,000	$5,000 to $7,499	$7,500 to $9,999	$10,000 to $12,499	$12,500 to $14,999	$15,000 to $17,499	$17,500 to $19,999	$20,000 or more
Householder 65 years and over:								
One person	2,092	2,702	3,002	3,073	3,583	4,023	3,439	3,915
Two persons or more	2,396	2,805	3,223	3,546	3,356	3,690	3,798	4,674
Householder under 65 years in--								
Married-couple family households:								
Two persons	2,680	2,821	2,864	3,181	3,140	3,165	3,316	4,441
Three persons	2,836	2,846	2,889	3,134	3,284	3,502	3,574	4,495
Four persons	3,115	3,042	3,247	3,207	3,622	3,387	3,647	4,789
Five persons	2,829	2,852	3,118	3,498	3,513	3,567	3,500	4,864
Six persons	3,799	2,973	2,927	3,201	3,618	2,806	4,024	4,106
Seven persons or more	3,307	2,094	2,965	3,615	3,511	3,870	4,161	4,701
Other family households:								
Two persons	2,721	3,032	2,991	3,197	3,479	3,574	3,733	4,485
Three persons	2,819	2,930	3,317	3,274	3,572	3,520	3,515	4,759
Four persons	2,971	3,027	3,324	3,680	3,209	3,873	3,514	4,678
Five persons	2,773	3,414	3,616	3,214	3,085	3,803	4,046	4,163
Six persons	2,614	3,346	3,358	3,042	3,566	2,498	3,468	4,188
Seven persons or more	3,209	3,204	3,204	3,467	3,332	2,383	3,594	4,602
Nonfamily households:								
One person	2,306	2,480	2,632	2,858	3,012	3,205	3,352	4,204
Two persons	2,934	3,082	3,264	3,436	3,449	3,595	3,451	4,635
Three persons or more	3,061	3,238	3,870	3,902	4,703	3,975	4,623	6,203

in these tables were replaced by expenditure-to-income ratios. These ratios were then used in the calculations for each of the 5 years.

Medical care benefits. The procedures used to estimate recipient value of medical care benefits were based on simple updates of the original 1979 techniques. For the purpose of estimating normal expenditures for medical care, a nonsubsidized population is, for all practical purposes, nonexistent. The aged population is almost totally covered by the Medicare program and the population under 65 years of age receives widespread coverage from employer-provided group health insurance.

The estimates of normal expenditures for medical care were made using data from the 1972-73 Consumer Expenditure Survey (CES) in spite of the major problems cited above. The normal expenditure tabulation used as the basis for this study is shown in table B-13. The data for the under-age-65 population were derived from CES survey cases reporting partial employer-provided coverage. The expenditure data do not include the amount of the employer's contribution, and therefore, the normal expenditures for this group are probably underestimated. The sample group used to derive the normal expenditures for the 65-and-over population included persons with Medicare coverage but excluded persons covered by Medicaid and those covered by both Medicaid and Medicare. Use of the Medicare population in estimates of normal expenditures is undesirable and probably results in underestimates of recipient value as well.

The normal expenditure data in table B-13 were tabulated from the 1972-73 CES. Adjustments were then made to the 1972-73 average medical expenditures and income classes to account for the increases in consumer prices. The expenditure data were adjusted by the change in the medical component within the overall Consumer Price Index (CPI). The income classes were adjusted by the change in the overall CPI. These same adjustments were made annually to update the 1979 figures in this table to the appropriate year between 1980 and 1984.

The assignment of recipient values followed the same procedures as outlined for food stamps. Separate estimates of recipient value were made based on the inclusion or exclusion of institutional care expenditures.

POVERTY BUDGET SHARES

The third procedure used to value noncash benefits in this study was the poverty budget share (PBS) approach. The PBS approach is a different and much more limited valuation technique that links the value of the noncash benefit directly to the current money income poverty concept. The PBS approach assumes that, for purposes of measuring poverty, the value assigned to the benefit can be no greater than the amount that is usually spent on the specified good or service by people near the poverty level, since values in excess of this amount cannot always substitute for other needs.

Food benefits. The values of food stamps and school lunch benefits were combined for the calculation of the PBS value for food benefits. The amount spent on food by families near the poverty line was assumed to be one-third of the appropriate poverty level. This reflects directly the food-to-income ratio used to develop the current poverty definition. The PBS limits for food benefits are shown in table B-14 for 1979 through 1984. The figures in this table are simply the weighted average

Table B-13. Normal Expenditure Values for Medical Care, by Age or Disability Status of the Householder and Size of Household

(In 1979 dollars)

Total household income	Householder age 65 years old and over or disabled		Householder under 65 years old and not disabled				
	One person	Two persons or more	One person	Two persons	Three persons	Four persons	Five persons or more
Under $1,250	341	637	99	209	307	380	410
$1,250 to $2,499	291	567	146	219	373	402	430
$2,500 to $3,749	385	578	178	290	390	396	421
$3,750 to $4,999	463	608	209	311	263	364	393
$5,000 to $6,249	488	828	248	336	256	383	414
$6,250 to $7,499	646	770	306	520	443	460	497
$7,500 to $8,749	610	891	289	569	518	419	575
$8,750 to $9,999	642	807	315	576	572	450	601
$10,000 to $11,24	684	868	302	585	652	637	675
$11,250 to $12,49	718	862	309	588	655	662	721
$12,500 to $13,74	738	1,060	299	606	662	588	712
$13,750 to $14,99	695	1,070	290	601	661	582	715
$15,000 or more	753	1,202	375	678	803	867	926

Table B-14. Poverty Budget Shares for Food, by Year and Size of Family Unit: 1979-84

(Figures in dollars)

Size of family unit	1979	1980	1981	1982	1983	1984
One person (unrelated individual)..	1,228	1,395	1,540	1,634	1,687	1,759
15 to 64 years.....	1,258	1,429	1,576	1,673	1,727	1,800
65 years and over.....	1,157	1,314	1,453	1,542	1,592	1,660
Two persons.....	1,567	1,779	1,972	2,094	2,161	2,254
Householder 15 to 64 years.....	1,619	1,839	2,037	2,162	2,232	2,328
Householder 65 years and over....	1,455	1,651	1,833	1,945	2,008	2,094
Three persons.....	1,921	2,180	2,417	2,564	2,646	2,759
Four persons.....	2,462	2,795	3,096	3,287	3,393	3,536
Five persons.....	2,912	3,308	3,669	3,895	4,016	4,189
Six persons.....	3,283	3,738	4,150	4,402	4,543	4,736
Seven persons (or more[1]).....	4,071	4,628	4,703	5,012	5,167	5,365
Eight persons.....	(X)	(X)	5,218	5,573	5,723	5,987
Nine persons or more.....	(X)	(X)	6,191	6,566	6,770	7,082

[1]1979 and 1980.
X Not applicable.

poverty threshold for the specified family type multiplied by one third.

The PBS value was computed by comparing the combined market value of food stamps and school lunch to the PBS limit. If the market value was greater than the PBS limit, the PBS value was constrained to the PBS limit. If the market value was lower, the PBS value was equal to the market value.

Public or other subsidized rental housing. The PBS values for public or other subsidized rental housing were computed using the 1979 and 1981 AHS data. Calculation of the PBS limits were based on the housing expenditure to income ratios shown in table B-15. These ratios represent the proportion of income spent on nonsubsidized rental housing by families with incomes within ± 25 percent of the poverty level and are averages of the 1979 and 1981 data from the AHS for nonsubsidized housing units.

The calculation of the PBS limit was made by multiplying the appropriate proportion in table B-15 by the family's poverty level. If the previously assigned market rent exceeded the PBS limit, the PBS value for public housing was made equal to the difference between the PBS limit and the amount of subsidized rent paid. If the market rent was less than the PBS limit, the PBS value for public housing was made equal to the market value of the subsidy.

Medical care. The PBS values for noncash medical care benefits were computed using the same expenditure to income ratios at the poverty line as used in the previous study. These ratios, which were derived from the 1960-61 Consumer Expenditure Survey, are shown in table B-16. The data from the 1960-61 survey were selected because they reflect expenditure patterns for medical care that existed prior to the Medicare program and expansion of employer-provided benefits. The PBS value for medical care was computed by comparing the combined market value of Medicare and/or Medicaid for the family with the PBS limit. The PBS value was equal to the PBS limit if the market value exceeded the limit or equal to the market value if the market value was lower.

Table B-15. Poverty Budget Shares for Public or Other Subsidized Rental Housing, by Size of Family Unit

Size of family unit	Expenditure-to-income ratio
Householder 65 years and over:	
One person	.567
Two persons or more	.525
Householder under 65 years in--	
Married-couple family households:	
Two persons	.498
Three persons	.446
Four persons	.384
Five persons	.324
Six persons	.288
Seven persons or more	.270
Other family households:	
Two persons	.548
Three persons	.471
Four persons	.401
Five persons	.344
Six persons	.299
Seven persons or more	.306
Nonfamily households:	
One person	.572
Two persons	.522
Three persons or more	.487

Table B-16. Poverty Budget Shares for Medical Benefits, by Size of Family Unit

(Ratios based on 1960-61 Consumer Expenditure Survey)

Size of family unit	Expenditure-to-income ratio
One person (unrelated individual):	
15 to 64 years	.044
65 years and over	.114
Two persons:	
Householder 15 to 64 years	.060
Householder 65 years and over	.103
Three persons	.053
Four persons	.044
Five persons	.054
Six persons or more	.048

Source: U.S. Bureau of the Census, Estimates of Poverty Including the Value of Noncash Benefits—1984, technical paper 55 (Washington, D.C.: U.S. Government Printing Office, 1985), pp. 53-66.

Information Reported by the Bureau of the Census Concerning SIPP Data Quality

Two major determinants of the quality of income data collected in household surveys are the magnitude of missing responses and the accuracy of the responses that are provided. This appendix has been included to supply information concerning nonresponse rates for selected income questions, the average amounts of income reported in the survey or assigned in the imputation of missing responses, and the extent to which the survey figures underrestimate numbers of income recipients and amounts of income received.

Nonresponse in this discussion refers to missing responses to specific questions or "items" on the questionnaire. Noninterviews or complete failure to obtain cooperation from any household member have not been considered in this examination of nonresponse rates. Adjustments to account for noninterviews are made by proportionally increasing the survey weights of interviewed households. Missing responses to specific questions are assigned a value in the imputation phase of the data processing operation.

Nonresponse is a very important factor in assessing the quality of survey data. Nonresponses to income questions cannot be considered random since experience has shown that persons with the highest nonresponse rates have reported characteristics such as education levels and occupations that, in general, differ from population averages. The most frequent causes of nonresponse are the inability of the respondent to answer the question because of either a 1) lack of knowledge or 2) refusal to answer. The first reason is especially important in situations of proxy response when one household member answers questions for another household member not present at the time of the interview. The practice of accepting proxy interviews from household members deemed "qualified" to answer is a standard procedure in the CPS and most other surveys conducted by the Bureau. During the third and fourth interview periods of SIPP, about 35 percent of the interviews were taken from proxy respondents.

The magnitude of nonresponse is generally presented in terms of a nonreponse rate computed by dividing the number of nonresponses by the total number of responses that should have been provided. The first two columns of table D-1 show the number of persons with income and nonresponse rate for a selected group of income amount questions from SIPP for the second quarter of 1984. Nonresponse rates for the March 1984 CPS based on annual income amount questions are shown in the third column.

Table D-1. Persons Nonresponse Rates for SIPP and the March 1984 CPS, and Median Monthly Amounts Reported and Imputed, for Selected Income Types

Income type	SIPP 1984 second quarter monthly average		March 1984 CPS nonresponse rate for amounts received	SIPP median monthly average amounts	
	Number with income (thous.)	Nonresponse rate for amounts received		Reported	Imputed
Wage or salary	96,902	7.5	17.4	$1,133	$1,207
Self-employment income	8,371	16.2	25.2	826	1,083
Federal Supplemental Security income	3,511	8.4	16.5	201	271
Social Security income	32,441	11.6	20.1	401	412
Aid to Families with Dependent Children	3,177	6.9	13.4	297	261
Unemployment compensation	2,269	13.6	19.0	388	292
Company or union pensions	7,938	14.0	22.6	238	256
Food stamp allotment	6,812	6.3	12.7	101	83
Veterans' compensation or pensions	3,503	11.2	16.6	128	98

The SIPP nonresponse rates ranged from a low of about 6 percent for food stamps to about 16 percent for self-employment income. These rates were computed by dividing the number of persons with missing responses on the amount received by the total number with either a missing or reported amount for that income type.

The SIPP nonresponse rates for second-quarter average monthly amounts contrast sharply with the higher nonresponse rates encountered in the March CPS. The rates for the CPS ranged from a low of 13 percent for food stamp allotments and Aid to Families with Dependent Children to 25 percent for self-employment income. The major emphasis given to complete and accurate income information in SIPP and 4-month recall period are two factors that have contributed to the significantly lower nonresponse rates in the SIPP.

Nonresponses are assigned values prior to producing estimates from the survey data. The procedure used to assign or impute responses for missing data for SIPP are of a type commonly referred to as a "hot deck" imputation method. This process assigns values reported in the survey by respondents to nonrespondents. The respondent from whom the value is taken is termed the "donor." Values from donors are stored in a matrix defined by demographic and economic data available for both donors and nonrespondents. Each cell of the matrix defines a unique combination of demographic and economic characteristics. For example, the imputation of an amount for monthly wage and salary income is based on eight different variables. These were 1) occupation, 2) sex, 3) age, 4) race, 5) educational attainment, 6) weeks worked, 7) usual hours worked per week, and 8) place of residence.

The last two columns in table D-1 compare median reported and imputed income amounts for SIPP monthly averages, second quarter 1984. The differences between reported and imputed median amounts were statistically significant at the 95-percent confidence level for wage and salary income, self-employment income, unemployment compensation, and veterans' compensation or pensions.

The second important determinant of data quality and probably the one examined most closely by users of the income data collected in household surveys is the accuracy of reported (and imputed) amounts. In general, household surveys have a tendency to underestimate the number of persons receiving income and the average amount received. These problems result for a variety of reasons including random response error, misreporting of sources of income, failure to report the receipt of income from a specified source, and failure to report the full amount received. The net effect of these kinds of problems is, for most income types, underestimation or underreporting of income amounts. The extent of underreporting is measured by comparing survey estimates with independently derived estimates usually based on administrative data that are, generally more reliable than the estimates derived from the survey. It should be noted that the independent estimates are subject to errors themselves. In addition, independent estimates do not reflect income attributable to the "underground" economy, some of which may be reported in the survey.

Table D-2 contains comparisons of SIPP estimates of the number of persons receiving specific income sources with independent estimates derived from various administrative sources. Table D-3 shows similar comparisons based not on the number of recipients but on the aggregate amount of income received. Data in both of these tables are preliminary and subject to revision.

The comparisons in table D-2 are limited to some of the major transfer programs for which administrative data are available for the April-June 1984 period. Adjustment factors were applied to these administrative figures in order to arrive at the independent estimates for the SIPP noninstitutional population eligible for interview. The adjustment factors used were based on procedures developed by Mathematical Policy

Table D-2. Comparison of Estimated Number of Income Recipients, for Selected Income Types, Second Quarter 1984: SIPP vs. Independently Derived Estimates

(Numbers in thousands)

Income type	Monthly average recipients		SIPP as a percent of independent estimate
	SIPP estimate	Independent estimate	
Federal Supplemental Security Income	3,492	3,574	97.7
Social Security income	32,432	33,190	97.7
Aid to Families with Dependent Children[1]	3,171	3,687	86.0
Unemployment compensation	2,212	2,682	82.5
Food stamp allotment	18,869	20,856	90.5
Veteran's compensation or pensions[1]	3,503	3,859	90.8

[1]Excludes dependents covered by payments.

Table D-3. Comparison of Estimated Aggregate Income Amounts Received, for Selected Income Types, Second Quarter 1984: SIPP vs. Independently Derived Estimates

(Monthly averages. Figures in millions of dollars)

Income type	SIPP estimate	Independent estimate	SIPP as a percent of the independent estimate
Wage or salary	138,641	146,916	94.4
Self-employment income	15,855	(NA)	(X)
Federal Supplemental Security Income	763	783	97.4
Social Security income	13,254	13,111	101.1
Aid to Families with Dependent Children	1,010	1,175	86.0
Unemployment compensation	897	1,079	83.1
Food stamp allotment	765	887	86.2
Veterans' compensation or pensions	792	1,063	74.5

NA Not available.
X Not applicable.

Research, Inc., for deriving independent estimates for the 1979 ISDP research panel.

Survey underestimates of income recipients ranged from about 18 percent for State unemployment compensation payments and 14 percent for Aid to Families with Dependent Children to about 2 percent for Social Security recipients.

The underreporting for Aid to Families with Dependent Children is related to misclassification of this income type as other types of public assistance or welfare. A total of 1,027,000 persons reported receiving general assistance and 176,000 reported receiving other types of welfare payments for the second quarter. A significant number of these cases are actually payments from the Aid to Families with Dependent Children program. This particular problem was also encountered and documented in the developmental ISDP.

Table D-3 provides comparisons of SIPP and independent estimates of the aggregate amount of income received for the total noninstitutional population for the second quarter of 1984. Nonseasonally adjusted, monthly independent estimates for wage and salary income is not available. The estimate shown for wage and salary is based on Bureau of Economic Analysis seasonally adjusted, annual rate estimates for the second quarter divided by 12. Other independent estimates shown in tables D-2 and D-3 are based on various sources including the Social Security Bulletin and unpublished figures from the Department of Health and Human Services, the Department of Agriculture, and the Veterans' Administration.

In most cases the comparisons in table D-3 on aggregate amounts for the second quarter parallel the figures in table D-2 for estimated number of recipients. The comparison for wage and salary income is difficult to interpret because the independent estimate is seasonally adjusted. A monthly independent estimate for self-employment income is not available because the self-employment income estimates are based on different concepts. The SIPP figure is based on the "salary" and other income received from the business by the owners. More refined comparisons between SIPP estimates and estimates derived from independent sources will be made in future reports.

Table D-4 shows the monthly averages for the number of income recipients and aggregate amounts of income received for the second quarter 1984 for the total population and the nonfarm population. Most of the largest sources of income have been included in this table.

Table D-4. Persons 15 Years Old and Over Receiving Income and Aggregate Amount Received, for Selected Income Types: Monthly Average, Second Quarter 1984

Income type	Total		Nonfarm	
	Number with income (thousands)	Aggregate amount (millions of dollars)	Number with income (thousands)	Aggregate amount (millions of dollars)
Wage or salary	97,086	138,641	95,368	136,621
Self-employment income	8,372	15,855	7,807	13,803
Social Security income	32,432	13,254	31,478	12,899
Federal Supplemental Security income	3,492	763	3,454	758
State unemployment compensation	2,212	897	2,201	892
Veterans' compensation or pensions	3,503	792	3,441	784
Workers' compensation	653	432	639	427
Aid to Families with Dependent Children	3,171	1,010	3,146	1,004
General assistance	1,027	202	1,022	201
Child support	3,119	741	3,094	738
Alimony	482	227	482	227
Company or union pensions	7,936	2,916	7,829	2,876
Federal employee pensions	1,812	1,638	1,789	1,616
U.S. military pensions	1,313	1,317	1,298	1,306
State government employee pensions	1,987	1,043	1,917	1,009
Local government employee pensions	834	451	819	440
Estates and trusts	315	246	311	245
Income from paid-up life insurance or other annuities	741	186	726	183
Money from relatives or friends	1,266	497	1,253	495
Interest income from regular savings accounts, money market deposit accounts, certificates of deposit or other savings certificates, and interest-bearing checking accounts	101,454	6,514	98,661	6,291
Interest income from money market funds, U.S. government securities, municipal or corporate bonds, and other interest-bearing assets	10,452	1,769	10,254	1,713
Interest on mortgages	3,485	897	3,377	847
Dividends	20,095	3,188	19,640	3,106
Net rental income	9,902	1,458	9,484	1,412
Income from royalties and other financial investments	2,838	1,532	2,659	1,467

Source: U.S. Bureau of the Census, Current Population Reports, Series P-70, No. 4, Economic Characteristics of Households in the United States: Second Quarter 1984, U.S. Government Printing Office, Washington, D.C., pp. 49-52.

Sampling Errors for Key SIPP Data

Two- to four-member AFDC families living alone	Estimated amount	Estimated sampling error at 95-percent confidence level[a]
Average monthly income		
Market value	$819	$50
Recipient value	646	50
Percentage participating in other welfare programs		
Medicaid	100%	•
Food stamps	96	3%
School lunch	57	8
Public housing	17	11
Section 8 housing	15	11
WIC	18	11
Percentage above the poverty line		
At market value		
Cash only	8	4
Cash and food stamps	13	5
Cash, food, and housing	26	6
Cash, food, housing, and Medicaid	60	7
At recipient value		
Cash only	8	4
Cash and food stamps	12	5
Cash, food, and housing	21	6
Cash, food, housing, and Medicaid	27	6
Average monthly income by family size		
At market value		
Two recipient	$655	$40
Three recipient	767	50
Four recipient	1,039	110
At recipient value		
Two recipient	522	40
Three recipient	597	50
Four recipient	824	120
Average AFDC payment by family size		
Two recipient	262	30
Three recipient	316	30
Four recipient	401	50

Comparison groups	Estimated amount	Estimated sampling error at 95-percent confidence level
Two- to four-member welfare families not receiving AFDC		
Average monthly income		
At market value		
Single parent	$1,024	$100
Married couple	1,399	120
Percentage above the poverty line		
At market value		
Single parent	71%	6%
Married couple	79	5
Households with two to four AFDC recipients and persons not receiving AFDC		
Average monthly income at market value	$1,674	$210
All U.S. households—percentage participating in selected welfare programs		
Medicaid coverage	9%	2%
Food stamps	7	2
School lunch	7	2
WIC	2	2
Housing assistance	4	2
SSI	3	2
AFDC	3	2

[a]Estimated sampling error computed using the Census Bureau procedures for SIPP described in SIPP Wave III Documentation.

Sampling Errors for Key County Estimates

	Estimated amount	Estimated sampling error at 95-percent confidence	95-percent confidence interval
Two- to four-member AFDC families living alone			
Average monthly income at market value			
Alameda County	$1,017	$41	$975 - $1,058
Albany County	906	21	885 - 926
Cuyahoga County	790	14	776 - 804
Fulton County	930	32	897 - 962
Average AFDC payments			
Alameda County	540	16	523 - $556
Albany County	392	10	381 - 402
Cuyahoga County	288	5	283 - 293
Fulton County	246	6	239 - 252
Percentage participating in other major welfare programs			
Alameda County			
Medicaid	100%	0%	100 - 100%
Food stamps	89	4	85 - 93
Public housing	23	3	20 - 26
Section 8 housing	9	5	4 - 14
School meals	69	6	63 - 75
WIC	16	4	12 - 20
Albany County			
Medicaid	100	0	100 - 100
Food stamps	99	4	95 - 100
Public housing	19	4	15 - 24
Section 8 housing	14	4	10 - 18
School meals	43	5	39 - 48
WIC	39	5	33 - 44
Percentage participating in other major welfare programs			
Cuyahoga County			
Medicaid	100%	0%	100 - 100%
Food stamps	97	2	95 - 99
Public housing	7	3	4 - 10
Section 8 housing	6	3	3 - 8
School meals	60	6	54 - 65
WIC	22	5	17 - 26

(continued)

	Estimated amount	Estimated sampling error at 95-percent confidence	95-percent confidence interval
Fulton County			
Medicaid	100	0	100 - 100
Food stamps	94	3	92 - 97
Public housing	49	6	43 - 55
Section 8 housing	27	5	22 - 32
School meals	63	5	58 - 68
WIC	17	4	13 - 21
Average income for AFDC families living in subsidized housing			
Alameda County	$1,327	$119	$1,208 - $1,446
Albany County	1,023	29	994 - 1,051
Cuyahoga County	1,050	32	1,018 - 1,083
Fulton County	1,012	25	987 - 1,037
Two- to four-member AFDC families living alone or with others not receiving AFDC[a]			
Average income for AFDC families with earnings			
Alameda County	$1,175	$171	$1,004 - $1,347
Albany County	1,085	59	1,025 - 1,144

[a]Data include only income and benefits of the AFDC-covered members of these households.

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